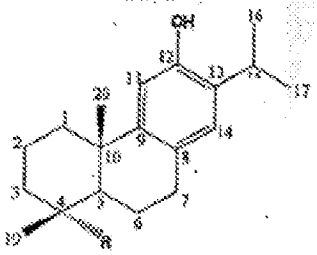
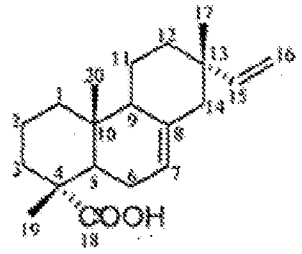
...ase number is 10/591,282, the structure in claim 1 and the structures ...laim 6.

[Claim 1]
An abietane diterpenoid compound represented by the following formula 1.
<Formula 1>

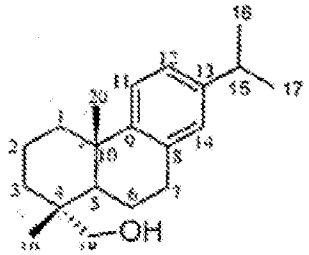


(R is dimethoxymethyl.)

<Formula 2>



<Formula 3>



FILE 'REGISTRY' ENTERED AT 15:25:47 ON 18 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUL 2008 HIGHEST RN 1034594-49-4
DICTIONARY FILE UPDATES: 17 JUL 2008 HIGHEST RN 1034594-49-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

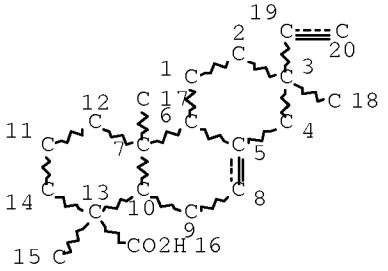
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

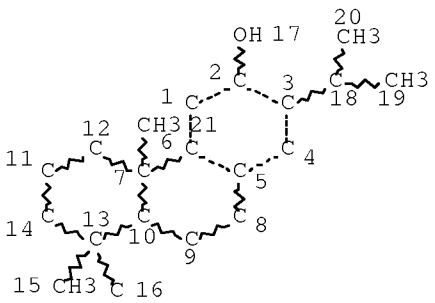
L9 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

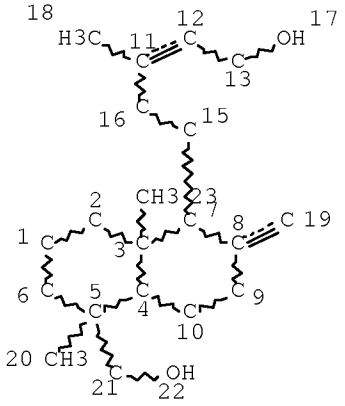
STEREO ATTRIBUTES: NONE
L11 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

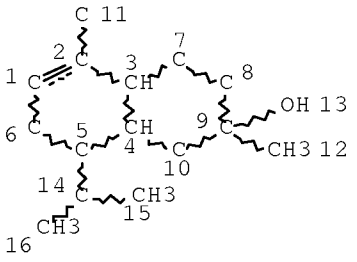
STEREO ATTRIBUTES: NONE
L15 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

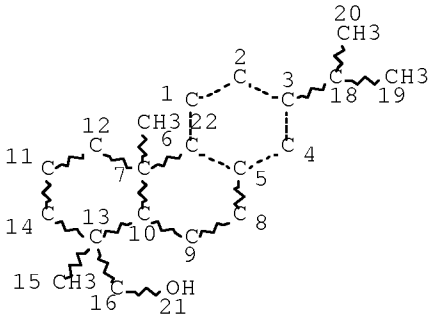
STEREO ATTRIBUTES: NONE
L17 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 16

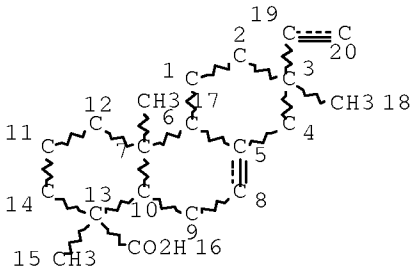
STEREO ATTRIBUTES: NONE
L23 54 SEA FILE=REGISTRY SSS FUL L15 OR L17
L26 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
L28 837 SEA FILE=REGISTRY SSS FUL L9 OR L11 OR L26
L29 STR

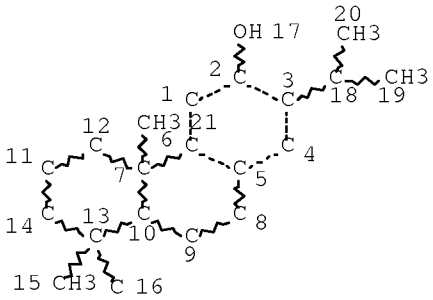


Form. 2

NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 4
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 11
CONNECT IS X2 RC AT 12
CONNECT IS X2 RC AT 14
CONNECT IS X1 RC AT 20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE
L30 STR

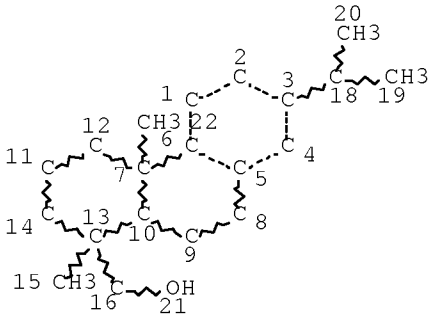


Form. 1

NODE ATTRIBUTES:
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 11
CONNECT IS X2 RC AT 12
CONNECT IS X2 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
L31 STR



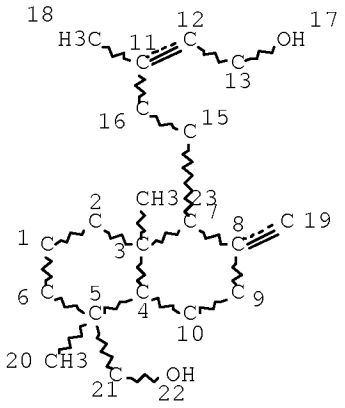
Form. 3

NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 4
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 11
CONNECT IS X2 RC AT 12
CONNECT IS X2 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

L32 STR



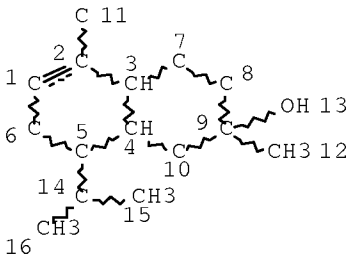
Form. 4

NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 6
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 10
CONNECT IS X2 RC AT 15
CONNECT IS X2 RC AT 16
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L33 STR



Form. 5

NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 6
CONNECT IS X2 RC AT 7
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 10
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 16

```
STEREO ATTRIBUTES: NONE
L34         891 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 OR L23
L36         352 SEA FILE=REGISTRY SUB=L34 SSS FUL (L29 OR L30 OR L31 OR
                L32 OR L33)

100.0% PROCESSED     891 ITERATIONS                          352 ANSWERS
SEARCH TIME: 00.00.01

FILE 'CAPLUS' ENTERED AT 15:25:47 ON 18 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 18 Jul 2008  VOL 149 ISS 4
FILE LAST UPDATED: 17 Jul 2008  (20080717/ED)

Caplus now includes complete International Patent Classification (IPC)
reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/legal/infopolicy.html

L38        2639 SEA ABB=ON  PLU=ON  L36
L39         113 SEA ABB=ON  PLU=ON  L38 AND THU/RL
                E CARDIOVASCULAR DISEASES+ALL/CT
                E E2+ALL
L40       24235 SEA ABB=ON  PLU=ON  "CARDIOVASCULAR SYSTEM, DISEASE"+OLD,PF
                T/CT
                E E115+ALL
L41       23067 SEA ABB=ON  PLU=ON  "CARDIOVASCULAR AGENTS"+PFT/CT
                E ANTICHOLESTEREMIC AGENTS+ALL/CT
L42       12356 SEA ABB=ON  PLU=ON  "ANTICHOLESTEREMIC AGENTS"+OLD/CT
                E HYPERLIPIDEMIA+ALL/CT
L43        9364 SEA ABB=ON  PLU=ON  HYPERLIPIDEMIA+OLD/CT
                E ATHEROSCLEROSIS+ALL/CT
L44       45237 SEA ABB=ON  PLU=ON  ATHEROSCLEROSIS+OLD/CT
                E ANTIATHEROSCLEROSIS AGENTS+ALL/CT
                E E2+ALL
L45       10350 SEA ABB=ON  PLU=ON  "ANTIARTERIOSCLEROTICS (L) ANTIATHEROSC
                LEROTICS"+PFT/CT
L46           9 SEA ABB=ON  PLU=ON  L39 AND ((L40 OR L41 OR L42 OR L43 OR
                L44 OR L45))
L47          84 SEA ABB=ON  PLU=ON  L38 AND (?ATHEROSCLER? OR (HEART OR
                CARDIOVASCULAR OR CARDIAC OR CARDIO VASCULAR)(3A)(DISEAS?
                OR DISORDER) OR ?LIPIDEMI? OR ?LIPIDAEMI? OR ?CHOLESTER?)
L48          20 SEA ABB=ON  PLU=ON  L47 AND (TREAT? OR THERAP? OR PREVENT?)
```

RL-role; THU-therap. use

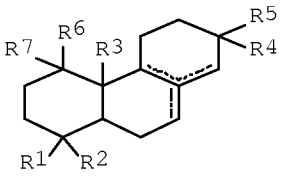
L49 22 L46 OR L48

L49 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 11 Jun 2008
ACCESSION NUMBER: 2008:697033 CAPLUS Full-text
DOCUMENT NUMBER: 149:24954
TITLE: Pimaric acid and related compounds for potassium channel openers, and therapeutic use thereof
INVENTOR(S): Imaizumi, Yuji; Ohwada, Tomohiko
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: U.S., 18pp., Cont.-in-part of Appl. No. PCT/JP2002/04085.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7385083	B2	20080610	US 2003-664165	20030917
US 20040116482	A1	20040617		
WO 2002087559	A1	20021107	WO 2002-JP4085	20020424
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20060235072	A1	20061019	US 2006-353189	20060214

PRIORITY APPLN. INFO.:		
JP 2001-127054	A	20010425
JP 2001-337723	A	20011102
WO 2002-JP4085	A2	20020424
US 2003-664165	A3	20030917

GI



I

AB The invention discloses a potassium channel opener comprising a compound (e.g., pimaric acid) represented by I (R1-R7 = H,, alkyl, alkenyl, halogen,

hydroxy, etc.; dotted line = optional bond), or a physiol. acceptable salt thereof, as an effective ingredient. Compds. of the invention may be used to treat hypertension, central nervous system disorders, etc. Diclorodehydroabietic acid is specifically claimed.

IT 5835-26-7, Isopimaric acid 57055-39-7, Dichlorodehydroabietic acid
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pimaric acid and related compds. for potassium channel openers, and therapeutic use)

L49 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 16 May 2008
ACCESSION NUMBER: 2008:590918 CAPLUS Full-text
DOCUMENT NUMBER: 148:554111
TITLE: Compounds and methods for modulating protein trafficking
INVENTOR(S): Bulawa, Christine; Fleming, James
PATENT ASSIGNEE(S): Foldrx Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 97pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008058269	A2	20080515	WO 2007-US84257	20071109

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2006-857941P P 20061109

AB The invention discloses compns. and methods for modulating protein trafficking and treating or preventing disorders characterized by impaired protein trafficking. Also disclosed are methods for producing a protein and identifying compds. that rescue protein trafficking defects.

IT 35928-32-6 35928-32-6D, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compds. and methods for modulating protein trafficking)

L49 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 13 Apr 2007
ACCESSION NUMBER: 2007:410249 CAPLUS Full-text
DOCUMENT NUMBER: 146:372818
TITLE: Activator for peroxisome proliferator-activated receptor (PPARγ) and composition containing the activator for preventing or

ameliorating specific symptom
INVENTOR(S): Kawada, Teruo; Kang, Min-Sook; Goto, Tsuyoshi; Ezaki, Yoichiro
PATENT ASSIGNEE(S): Kyoto University, Japan; Arakawa Chemical Industries, Ltd.
SOURCE: PCT Int. Appl., 27pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007040006	A1	20070412	WO 2006-JP317485	20060905

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-257815 A 20050906

AB Disclosed is an activator for peroxisome proliferator-activated receptor γ characterized by containing at least one compound selected from the group consisting of dehydroabietic acid, 13β-Δ8- dihydroabietic acid and isopimaric acid or a pharmaceutically acceptable salt thereof. This activator is useful in preventing or ameliorating at least one symptom selected form the group consisting of insulin resistance, type 2 diabetes, hyperlipemia, hypertension, obesity of the visceral fat type and fatty liver. For example, the PPAR-γ ligand activity of dehydroabietic acid was in vitro examined Also, a tablet containing dehydroabietic acid was formulated.

IT 1740-19-8 5835-26-7, Isopimaric acid
RL: FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(activator for peroxisome proliferator-activated receptor (PPARγ) containing abietic acid derivs., and composition containing same)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 13 Apr 2007
ACCESSION NUMBER: 2007:409540 CAPLUS Full-text
DOCUMENT NUMBER: 146:372817
TITLE: Activator for peroxisome proliferator-activated receptor (PPARα) and composition containing the activator for preventing or ameliorating specific symptom
INVENTOR(S): Kawada, Teruo; Kang, Min-Sook; Goto, Tsuyoshi; Ezaki, Yoichiro
PATENT ASSIGNEE(S): Kyoto University, Japan; Arakawa Chemical Industries, Ltd.

SOURCE: PCT Int. Appl., 27pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007040005	A1	20070412	WO 2006-JP317484	20060905

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-257812 A 20050906

AB Disclosed is an activator for peroxisome proliferator-activated receptor α (PPARα) characterized by containing, as the active ingredient, at least one compound selected from the group consisting of dehydroabietic acid, mercusic acid, 13β-Δ8-dihydroabietic acid and 12-sulfodehydroabietic acid or a pharmaceutically acceptable salt thereof. This activator is useful in preventing or ameliorating at least one symptom selected form the group consisting of insulin resistance, type 2 diabetes, hyperlipemia, hypertension, obesity of the visceral fat type and fatty liver. For example, the PPAR-α ligand activity of mercusic acid was in vitro tested. Also, a tablet containing dehydroabietic acid was also disclosed.

IT 1740-19-8, Dehydroabietic acid
RL: FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(activator for peroxisome proliferator-activated receptor (PPARα) containing abietic acid derivs., and composition containing same)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 05 Mar 2007
ACCESSION NUMBER: 2007:239160 CAPLUS Full-text
DOCUMENT NUMBER: 147:463223
TITLE: Effect of cobalt ions on the metabolism of some volatile and polar compounds in the marine invertebrates Mytilus galloprovincialis and Actinia equina
AUTHOR(S): Nechev, Jordan; Stefanov, Kamen; Nedelcheva, Diana; Popov, Simeon
CORPORATE SOURCE: Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, Sofia, Bulg.
SOURCE: Comparative Biochemistry and Physiology, Part B: Biochemistry & Molecular Biology (2007), 146B(4), 568-575

CODEN: CBPBB8; ISSN: 1096-4959
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The compns. of the volatile and polar fractions from 2 coexisting Black Sea invertebrates, the mussel Mytilus galloprovincialis and the beadlet anemone Actinia equina, were established. The main metabolites in the volatile fraction from the investigated animals appeared to be Me esters of fatty acids and fatty aldehydes. In the polar fraction from both animals low concns. of free acids and nitrogen-containing compds. were obtained. Free carbohydrates were in much higher concns. in M. galloprovincialis than in A. equina. Some sterols, probably as polar conjugates, were identified mainly in A. equina. Significant changes among all compds. appeared after treatment of both invertebrates with 2 different concns. of Co ions. The variety of changes in each invertebrate could be due to their different evolutionary status. The effect of Co ions was often stronger at medium Co-ion concns.
IT 1740-19-8, Dehydroabietic acid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Co accumulation and effect on metabolism of volatile and polar compds. in marine invertebrates)
REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 15 Sep 2005
ACCESSION NUMBER: 2005:1001814 CAPLUS Full-text
DOCUMENT NUMBER: 143:311932
TITLE: Novel abietane diterpenoid compounds from Torreya nucifera for prevention and treatment of cardiovascular disease
INVENTOR(S): Jeong, Tae-Sook; Lee, Woo-Song; Kim, Hyoung-Chin; Choi, Yang-Kyu; Kim, Ju-Ryoung; An, So-Jin; Im, Kyoung-Ran; Jang, Ki-Chang; Moon, Og-Sung; Son, Jun-Seock
PATENT ASSIGNEE(S): Korea Research Institute of Bioscience and Biotechnology, S. Korea; Jeong, Tae-Sook; Lee, Woo-Song; Kim, Hyoung-Chin; Choi, Yang-Kyu; Kim, Ju-Ryoung; An, So-Jin; Im, Kyoung-Ran; Jang, Ki-Chang; Et Al.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005084141	A2	20050915	WO 2005-KR472	20050222

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,

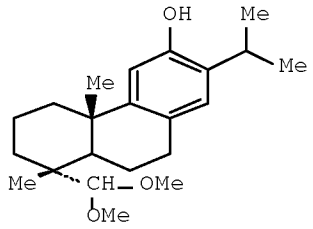
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

KR 2006073751	A	20060629	KR 2004-112140	20041224
KR 2006043067	A	20060515	KR 2005-14523	20050222
JP 2007526299	T	20070913	JP 2007-501703	20050222
US 20070190192	A1	20070816	US 2006-591282	20060831
KR 2007041484	A	20070418	KR 2007-30866	20070329
KR 772495	B1	20071101		

PRIORITY APPLN. INFO.:

KR 2004-14236	A	20040303
KR 2004-89372	A	20041104
KR 2004-112140	A	20041224
KR 2005-14523	A3	20050222
WO 2005-KR472	W	20050222

GI



I

AB The present invention relates to a composition for the prevention and the treatment of cardiovascular disease containing exts. of T. nucifera or abietane diterpenoid compound or terpenoid compound isolated from the same as an effective ingredient.T. nucifera exts. or abietane diterpenoid compound or terpenoid compound isolated from the same of the present invention not only shows excellent anti-oxidative activity to LDL but also effectively inhibits ACAT activity. Further, T. nucifera exts. of the present invention reduce blood LDL cholesterol and total cholesterol. Compds. isolated from T. nucifera include I, ferruginol, 18-hydroxyferruginol, isopimaric acid, dehydroabietinol, and kayadiol.

IT 514-62-5, Ferruginol 3772-55-2, Dehydroabietinol 5835-26-7, Isopimaric acid 13742-23-9 22595-48-8 26296-35-5, Kayadiol 108904-92-3, 18-Oxoferruginol 864494-92-8
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PROC (Process); USES (Uses)
(abietane diterpenoid compds. from Torreya nucifera for prevention and treatment of cardiovascular disease)

L49 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 20 Oct 2003
ACCESSION NUMBER: 2003:821864 CAPLUS Full-text

DOCUMENT NUMBER: 140:265862
TITLE: In vivo and in vitro assessment of the androgenic potential of a pulp and paper mill effluent
AUTHOR(S): Ellis, Rosanne J.; van den Heuvel, Michael R.; Bandelj, Emil; Smith, Murray A.; McCarthy, Lynda H.; Stuthridge, Trevor R.; Dietrich, Daniel R.
CORPORATE SOURCE: Forest Research, Rotorua, N. Z.
SOURCE: Environmental Toxicology and Chemistry (2003), 22(7), 1448-1456
CODEN: ETOCDK; ISSN: 0730-7268
PUBLISHER: SETAC Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The androgenic potential of a New Zealand pulp and paper mill effluent was measured by applying a combination of in vitro and in vivo bioassays with mosquitofish (Gambusia affinis) and goldfish (Carassius auratus). The in vivo method assessed the rate of gonopodial development (masculinization) and alterations from normal reproductive behavior in adult female mosquitofish exposed for 21 d to untreated or secondary-treated pulp mill effluent. A second in vivo mosquitofish exposure tested the effect of glass-fiber (type C) filtration of secondary-treated effluent on rates of expression of the same endpoints. Extractable orgs. analyses of effluents and exts. thereof were conducted. Mosquitofish demonstrated significant masculinization on exposure to either treated or untreated effluent; the frequency of gonopodial development was reduced with effluent secondary-treatment. Male mating behavior was observed in the masculinized adult females. Glass-fiber (type F) filtration of the treated effluent eliminated the masculinizing effect, suggesting that the bioactive compds. were associated with the suspended solids. The in vitro method measured the binding of compds. within a treated thermomech./bleached kraft effluent extract to androgen receptors contained in goldfish testis cytosol. Exposure to exts. of either the particulate (glass-fiber filtered) or the dissolved organic fraction of the effluent produced significant binding (as indicated by the displacement of radiolabeled testosterone) to the androgen receptor in goldfish gonadal tissue. Thus, the dissolved orgs. extract of the treated effluent contained compds. androgenic to goldfish in vitro but not to mosquitofish in vivo. The combined in vitro and in vivo data suggest that the effluent in question could exert effects on the reproductive physiol. of fishes through an androgenic mechanism. The androgenic compds. androstenedione and testosterone were not detected in the exts. used for the in vitro component of this study.

IT 1740-19-8, Dehydroabietic acid 5835-26-7, Isopimaric acid
RL: POL (Pollutant); OCCU (Occurrence)
(pulp and paper mill effluents composition and androgenic potential assessed by goldfish and mosquitofish bioassay)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 04 Jul 2003
ACCESSION NUMBER: 2003:512088 CAPLUS Full-text
DOCUMENT NUMBER: 139:79142
TITLE: Tricyclic terpenes of the family of abietic acid as RANTES receptor ligands
INVENTOR(S): Saxena, Geeta; Tudan, Christopher R.; Merzouk, Ahmed; Salari, Hassan
PATENT ASSIGNEE(S): Chemokine Therapeutics Corporation, Can.
SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S. Ser. No. 881,559.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030125380	A1	20030703	US 2001-992550	20011113
US 6831101	B2	20041214		
US 20030092674	A1	20030515	US 2001-881559	20010614
WO 2002102365	A1	20021227	WO 2002-CA840	20020606
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002312668	A1	20030102	AU 2002-312668	20020606
PRIORITY APPLN. INFO.:			US 2001-881559 A2	20010614
			US 2001-992550 A	20011113

OTHER SOURCE(S): MARPAT 139:79142

AB A method of treating a chemokine- or chemokine receptor-mediated disease using a tricyclic terpene compound that binds to one or more RANTES receptors is described. For example, the ability of tricyclic terpenes to competitively inhibit binding of the chemokine ligand RANTES to its receptors (CCR-1, -3, -4, and -5) on THP-1 type cells was demonstrated. Thus neoabietic acid (CTCM 189), sandaraco-pimaric acid, and ammonium pimarate at 4 μg/mL inhibited RANTES binding by 68%, 36%, and 48%, resp. Neoabietic acid showed an almost complete inhibition of RANTES-induced [Ca2+]i mobilization in THP-1 cells at the concentration of 5 μM. In accordance with this aspect of the invention, the neoabietic acid or corresponding salts may be used for the treatment of a wide range of inflammatory diseases such as gout, arthritis, osteoarthritis, rheumatoid arthritis, reperfusion injuries, inflammatory bowel diseases, and ARDS.

IT 1740-19-8
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tricyclic terpenes based on abietic acid as chemokine receptor ligands for treatment of chemokine-mediated disease)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 12 May 2003
ACCESSION NUMBER: 2003:357723 CAPLUS Full-text
DOCUMENT NUMBER: 139:201833
TITLE: Molecular markers of anthropogenic activity in sediments of the Havel and Spree rivers (Germany)
AUTHOR(S): Ricking, M.; Schwarzbauer, J.; Franke, S.
CORPORATE SOURCE: Department of Earth Sciences, Environmental Organic Geochemistry, Free University of Berlin, Berlin, 12249, Germany

SOURCE: Water Research (2003), 37(11), 2607-2617
CODEN: WATRAG; ISSN: 0043-1354
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Detailed gas chromatog./mass spectrometric analyses were applied to sediment samples of the Havel and Spree rivers, tributaries to the Elbe River, in order to identify specific mol. markers of anthropogenic activities. Despite a wide variety of lipophilic organic compds. from diffuse anthropogenic contamination, a local emission of an industrial point source was reflected by specific markers including halogenated compds. and N-containing substances (4-ethylnitrobenzene, formyl piperidine, acetyl piperidine). In addition to well-known anthropogenic markers various new mol. tracers were detected and are discussed, namely plasticizers (alkylsulfonic acid aryl esters, tri-Bu and tricresyl phosphates), synthetic fragrances (galaxolide, tonalide, 4-oxoisophorone), additives of personal care products (4-methoxycinnamic acid 2-ethylhexyl ester, benzyl benzoate, dibenzyl ether, benzophenone), occurring due to sewage treatment plant input.

IT 1740-19-8, Dehydroabietic acid
RL: POL (Pollutant); OCCU (Occurrence)
(mol. markers of anthropogenic activity in sediments of Havel and Spree rivers, Germany)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 20 Jan 2002
ACCESSION NUMBER: 2002:54083 CAPLUS Full-text
DOCUMENT NUMBER: 136:258484
TITLE: Exposure of Reproductively Maturing Rainbow Trout to a New Zealand Pulp and Paper Mill Effluent
AUTHOR(S): van den Heuvel, M. R.; Ellis, R. J.; Tremblay, L. A.; Stuthridge, T. R.
CORPORATE SOURCE: Forest Research, Rotorua, N. Z.
SOURCE: Ecotoxicology and Environmental Safety (2002), 51(1), 65-75
CODEN: EESADV; ISSN: 0147-6513
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Long-term studies on the reproductive fitness of fish under controlled exposure conditions are necessary to address some of the controversy surrounding the field-based studies of pulp and paper effluent effects. This study undertook effluent exposures of 2+ age rainbow trout that were approx. halfway through gonadal growth. Trout were exposed to a mixed thermomech./bleached kraft effluent in 12,000-L flow-through exposure tanks at an environmental research facility located at a pulp and paper mill in Kawerau, New Zealand. Trout were exposed to either upstream river water or 10% effluent in upstream river water and were maintained at a ration of 0.7% of body wet weight during the experiment Results of the 2-mo study indicated that trout survival was not significantly different between effluent-exposed tanks and reference tanks. There was extensive growth during the exposure but no differences were found due to effluent exposure. Gonadal development was not significantly different between treatments . Steroid hormone concns. in males and females were not affected by effluent exposure. The effluent showed no potential to be estrogenic as indicated by a lack of vitellogenin induction in male trout. Other physiol. indicators of energy storage and utilization also showed no significant differences. Modest induction of hepatic 7-ethoxyresorufin-O-deethylase (2.5-fold) was the only detectable biol. effect

of the exposure. Biliary concentration of effluent-related compds. were typical of pulp mill effluent exposure and further suggested that the source of phytosterols was in fact dietary and not effluent-derived. (c) 2002 Academic Press.

IT 1740-19-8, Dehydroabietic acid 5835-26-7, Isopimaric acid
RL: BSU (Biological study, unclassified); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
(exposure of reproductively maturing rainbow trout to New Zealand pulp and paper mill effluent)

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 02 Jan 2002
ACCESSION NUMBER: 2002:4929 CAPLUS Full-text
DOCUMENT NUMBER: 137:51614
TITLE: Lipids as indicators of eutrophication in marine coastal sediments
AUTHOR(S): Pinturier-Geiss, L.; Mejanelle, L.; Dale, B.; Karlsen, D. A.
CORPORATE SOURCE: Department of Geology, University of Oslo, Blindern, Oslo, N-0316, Norway
SOURCE: Journal of Microbiological Methods (2002), 48(2-3), 239-257
CODEN: JMIMDQ; ISSN: 0167-7012
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Total organic C (TOC) and sedimentary lipid content were examined in Bunnefjord, the inner-most part of Oslofjord in Norway. Bunnefjord is an intermittent anoxic basin which has undergone major eutrophication since the early 1800s. A sediment core from this fjord was collected at 100 m depth under anoxic remnant water. The first 15 cm corresponded to deposits from 1500 to present were analyzed. Lipid classes were quantified by thin layer chromatog.-flame ionization detection; the mol. composition of selected lipid classes was analyzed by gas chromatog. and gas chromatog.-mass spectrometry. Lipids were dominated by 2 main classes, phospholipids and hydrocarbons. Hydrocarbons represented ≤7.4% of total lipids in sediment layers covering the period when the most extensive cultural eutrophication occurred (1900-1970). Higher fluxes of organic C produced during this period may have controlled hydrocarbon inputs to sediment, due to the hydrophobic character of these pollutants. Hydrocarbon concns. reversed toward pre-industrial levels in more recent layers, suggesting improved water quality, possibly in response to improved wastewater treatment in cities around Bunnefjord. The second most abundant pool of lipids consisted of phospholipids, mostly contributed by bacteria. Even though concentration decreased with depth, the relative proportions to total lipids remained high, mainly in the deepest layers (>80% of total lipids). A rapid decrease of polyunsatd. fatty acid Me esters (FAME) from the phospholipid fraction in the upper 4 cm suggested a rapid biodegrdn. of planktonic input and meiofauna. Odd-branched fatty acids were more probably contributed by bacteria linked to the high sedimentary hydrocarbon content. Down-core distribution of 16:1ω7, 18:1ω7, 18:1ω5 esterified to phospholipids suggested a vertical zonation of the microbial community in relation to redox conditions and available organic matter. In addition to bacterial S biomass, the presence of hopanoic acids in the phospholipids fraction suggested the contribution of bacteria growing on CH4. According to sterol composition, dominated by 4α(H)-methylsterols, dinoflagellates

represent the major contributors to organic matter produced in the water column, particularly during the period of extensive eutrophication. Long-chain diols (1,13-C26, 1,15-C30, 1,15-C32) and long-chain keto-ols (1,15-C30 and 1,15-C32) are reported for the first time at high latitudes. Their relative distribution (diol and keto-ol indexes of Versteegh, et al. [1997]) have depicted a particular event during the eutrophication period, a freshwater intrusion with input of land-derived organic matter. This is in accordance with the down-core distribution of freshwater/terrestrial markers as sitosterol, dehydroabietic acid. and iso- and anteiso-pimaric acids. Diol and keto-ol indexes also underlined the general transition trend from marine to more brackish water in Bunnefjord. These last observations provide confidence into the use of these compds. in paleoenvironmental reconstruction.

IT 1740-19-8, Dehydroabietic acid 5835-26-7, Iso-pimaric acid
RL: OCU (Occurrence, unclassified); POL (Pollutant); OCCU (Occurrence)
(lipids as indicators of eutrophication in coastal sediment of Bunnefjord, Oslofjord, Norway)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 23 Nov 2001
ACCESSION NUMBER: 2001:848652 CAPLUS Full-text
DOCUMENT NUMBER: 136:144962
TITLE: Cardioactive diterpenoids from the roots of Salvia amplexicaulis
AUTHOR(S): Kolak, Ufuk; Ari, Sule; Birman, Husniye; Hasancebi, Semra; Ulubelen, Ayhan
CORPORATE SOURCE: Faculty of Pharmacy, Department of Chemistry, University of Istanbul, Istanbul, 34452, Turk.
SOURCE: Planta Medica (2001), 67(8), 761-763
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Five diterpenoids, three steroids, four triterpenoids and one flavonoid were isolated from the roots of Salvia amplexicaulis Lam. (Lamiaceae). Structures of these compds. were elucidated by spectroscopic anal. The crude extract and the pure compds. were tested for cardiovascular parameters using Wistar Albino rats. The crude extract, and 7-oxo-abieta-9,12,14-triene, ferruginol, stigmast-4-en-3-one showed a vasodepressor effect.

IT 514-62-5P, Ferruginol
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cardioactive diterpenoids from roots of Salvia amplexicaulis)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 21 Feb 1996
ACCESSION NUMBER: 1996:110235 CAPLUS Full-text
DOCUMENT NUMBER: 124:171159
ORIGINAL REFERENCE NO.: 124:31655a,31658a
TITLE: Wood-derived estrogens: studies in vitro with breast cancer cell lines and in vivo in trout
AUTHOR(S): Mellanen, Pirkko; Petaenen, Tiina; Lehtimaeki, Jyrki; Maekelae, Sari; Bylund, Goeran; Holmbom,

Bjarne; Mannila, Erkki; Oikari, Aimo; Santti, Risto
CORPORATE SOURCE: Int. Biomedicine, Univ. Turku, Turku, Finland
SOURCE: Toxicology and Applied Pharmacology (1996), 136(2), 381-8
CODEN: TXAPA9; ISSN: 0041-008X
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The wood-derived compound, β-sitosterol (purity >900), was shown to be estrogenic in fish. It induced the expression of the vitellogenin gene in the liver of juvenile and methyltestosterone-treated rainbow trout. Structural similarities to β-sitosterol not-withstanding, cholesterol, citrostadienol, β-sitostanol, and 5-androstene-β,17β-diol, an estrogenic member of the androstenic steroid group, were inactive. An abietic acid mixture (37% abietic acid, 6% dehydroabietic acid, and a remainder of unknown compds.) showed slight hormonal activity in feed, but it was completely inactive when given i.p. in implant. The estrogenic component of the abietic acid preparation was not identified. In addition to β-sitosterol and abietic acid, several other wood-derived compds. including betulin, isorhapontigenin, isorhapontin, and pinosylvin were estrogenic in breast cancer cells (MCF-7 or T-47D). However, betulin and pinosylvin, available in sufficient amts. for in vivo testing, did not induced the expression of the vitellogenin gene. Differences in the primary sequences of human and fish estrogen receptors (hormones as well as DNA-binding regions) or uptake and metabolism of the compds. may explain the discrepancy between the two estrogen bioassays. Wood-derived compds. such as β-sitosterol, present in pulp and paper mill effluents, may account for the weak estrogenicity of debarking effluent seen at the vitellogenin expression bioassay.

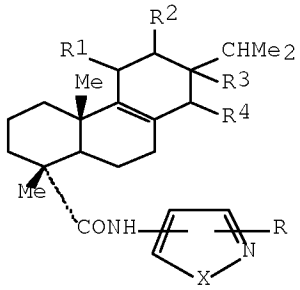
IT 1740-19-8, Dehydroabietic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(estrogenicity of wood-derived polycyclic compds. determined in breast cancer cell line proliferation and vitellogenin expression in trout liver)

L49 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 25 Jun 1989
ACCESSION NUMBER: 1989:231929 CAPLUS Full-text
DOCUMENT NUMBER: 110:231929
ORIGINAL REFERENCE NO.: 110:38467a,38470a
TITLE: Preparation of pyrazolyl- and thiazolylabietic acid amides as anticholesteremics
INVENTOR(S): Yoshikuni, Yoshiaki; Chokai, Shoichi; Fujita, Ikuo; Ozaki, Takayuki
PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3704404	A1	19870820	DE 1987-3704404	19870212
DE 3704404	C2	19910307		
JP 62190169	A	19870820	JP 1986-31585	19860215
JP 05074588	B	19931018		

JP 62190177	A	19870820	JP 1986-31586		19860215
JP 06006580	B	19940126			
GB 2186575	A	19870819	GB 1987-3529		19870216
GB 2186575	B	19891108			
FR 2598413	A1	19871113	FR 1987-1924		19870216
FR 2598413	B1	19900323			
US 4755523	A	19880705	US 1987-15287		19870217
PRIORITY APPLN. INFO.:			JP 1986-31585	A	19860215
			JP 1986-31586	A	19860215

OTHER SOURCE(S): MARPAT 110:231929
GI



I

AB The title compds. [I; R = H, alkyl, Ph, HO2CCH2; R1-R4 = H; R1R2, R3R4 = bond; X = R5N, S; R5 = H, alkyl (un)substituted Ph] were prepared as hypocholesterolemics, useful in the treatment of arteriosclerosis. Δ8-Dehydroabietic acid in refluxing C6H6 was treated with SOCl2 for 2 h. The resulting acid chloride was amidated with 1-phenyl-5-aminopyrazole in dioxane containing Et3N to give 70% 1-phenyl-5-(Δ8-dehydroabietoylamino)pyrazole. I reduced serum cholesterol when administered orally to rats and mice.

IT 120899-24-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(6repn. of, as anticholesteremic)

IT 1740-19-8, Dehydroabietic acid
RL: PROC (Process)
(conversion of, to acid chloride)

IT 120899-16-3P 120899-17-4P 120899-20-9P
120899-21-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anticholesteremic)

L49 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 10 Dec 1988
ACCESSION NUMBER: 1988:615735 CAPLUS Full-text
DOCUMENT NUMBER: 109:215735
ORIGINAL REFERENCE NO.: 109:35613a,35616a
TITLE: Di- and triterpenoids in essential oil wastes-from pinus, lavender, and salvia
AUTHOR(S): Khadzhieva, P.; Aleksiev, K.; Topalova, I.
CORPORATE SOURCE: Dep. Chem., Sofia Univ., Sofia, 1126, Bulg.
SOURCE: F.E.C.S. Int. Conf. Chem. Biotechnol. Biol. Act. Nat. Prod., [Proc.], 3rd (1987), Meeting Date 1985, Volume 5, 519-24. VCH: Weinheim, Fed. Rep.

Ger.
CODEN: 56IAAB
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Sterols, amyrins and di- and triterpenoid acids isolated from Pinus, lavender, and salvia oil wastes are suitable for biocosmetic prepns. with therapeutic-prophylactic action. The di- and triterpenoid acid fraction of Pinus coniferous waste is especially valid for antinicotinic prepns.
IT 1740-19-8, Dehydroabietic acid 5155-70-4
RL: BIOL (Biological study)
(of essential oil wastes, for cosmetic use)

L49 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 15 Apr 1988
ACCESSION NUMBER: 1988:137310 CAPLUS Full-text
DOCUMENT NUMBER: 108:137310
ORIGINAL REFERENCE NO.: 108:22437a,22440a
TITLE: Organic extractables in municipal wastewater, Vancouver, British Columbia
AUTHOR(S): Rogers, Ian H.; Birtwell, Ian K.; Kruzynski, George M.
CORPORATE SOURCE: West Vancouver Lab., Dep. Fish. Oceans, West Vancouver, BC, V7V 1N6, Can.
SOURCE: Water Pollution Research Journal of Canada (1986), 21(2), 187-204
CODEN: WRJCD9; ISSN: 0197-9140
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Composite 5-7-day samples of chlorinated and unchlorinated primary- treated municipal wastewater were collected at the Iona Island treatment plant during a 62-day exposure of juvenile chinook salmon (Oncorhynchus tshawytscha). No differences between chlorinated and unchlorinated samples were detectable and 9 chlorinated extractables were identified. Mass spectrometric anal. of sewage and sludge exts. identified 100 base/neutral components and 60 acidic substance. Some major constituents were quantified. Fatty acids, petroleum hydrocarbons, aromatic acids, and chemical disinfectants were predominant. Toxic compds. present included chlorophenols, polynuclear aromatic hydrocarbons (PAH) nonylphenols, and nonylphenolethoxylates. Tetrachlorophenol and PCP reached maximum levels of 7.8 and 13.2μg/L, resp. The PAH were heavily concentrated in sludge samples. Nonylphenol was present in wastewater and sludge but the corresponding ethoxylates occurred only in wastewater. PCBs were detectable only in sludge. Some novel identifications included 2 substituted monochlorophenol disinfectants and 2 generic drugs.
IT 1740-19-8, Dehydroabietic acid
RL: POL (Pollutant); OCCU (Occurrence)
(in wastewater treatment effluent and sludge, chlorination in relation to, in Vancouver, British Columbia)

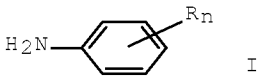
L49 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 12 May 1984
ACCESSION NUMBER: 1978:7124 CAPLUS Full-text
DOCUMENT NUMBER: 88:7124
ORIGINAL REFERENCE NO.: 88:1213a,1216a
TITLE: Abietanilide derivatives
INVENTOR(S): Murai, Hiromu; Ohata, Katsuya; Enomoto, Hiroshi; Sempuku, Kenji; Kitaguchi, Koji; Fujita, Yukuo; Yoshikuni, Yoshiaki; Kura, Kohei; Saito, Katsuhide; et al.
PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52083650	A	19770712	JP 1976-238	19760101
JP 56040150	B	19810918		

PRIORITY APPLN. INFO.: JP 1976-238 A 19760101

GI



I

AB Nineteen N-(substituted phenyl)abietamides, having serum cholesterol-lowering activity (no data), were prepared by reaction of the corresponding carboxylic acids or their reactive derivs. with the anilines I (Rn = Me, Et, 3-OH-4-CO2H, etc. n=1-3). Thus, 48.4 g 2,6-xylidine was treated with an acid chloride prepared from 6.1 g Δ8-dihydroabietic acid and excess SOCl2 at room temperature with occasional shaking to give 80% N-(2,6-dimethylphenyl)- Δ8-dihydroabietamide.

IT 59861-20-0P 59861-21-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L49 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 12 May 1984
ACCESSION NUMBER: 1976:463202 CAPLUS Full-text
DOCUMENT NUMBER: 85:63202
ORIGINAL REFERENCE NO.: 85:10185a,10188a
TITLE: Abietamide derivatives
INVENTOR(S): Murai, Hiromu; Ohata, Katsuya; Enomoto Hiroshi; Sempuku, Kenji; Kitaguchi, Koji; Fujita, Yukio; Yoshikuni, Yoshiaki; Kura, Kohei; Mori, Tamiki; et al.
PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
SOURCE: Ger. Offen., 17 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2535930	A1	19760325	DE 1975-2535930	19750812
JP 51026864	A	19760305	JP 1974-99386	19740828
JP 52002911	B	19770125		
JP 51056438	A	19760518	JP 1974-129295	19741109

JP 52012709	B	19770408			
GB 1452053	A	19761006	GB 1975-33442		19750811
US 4009206	A	19770222	US 1975-604308		19750813
ZA 7505239	A	19760728	ZA 1975-5239		19750815
AU 7584046	A	19770106	AU 1975-84046		19750818
AT 7506412	A	19761115	AT 1975-6412		19750819
AT 337672	B	19770711			
DK 7503769	A	19760229	DK 1975-3769		19750821
CH 593920	A5	19771230	CH 1975-10977		19750825
DD 122375	A5	19761005	DD 1975-188031		19750826
SE 7509513	A	19760301	SE 1975-9513		19750827
SE 427655	B	19830425			
SE 427655	C	19830804			
FR 2282872	A1	19760326	FR 1975-26423		19750827
FR 2282872	B1	19790914			
ES 440514	A1	19770301	ES 1975-440514		19750827
CA 1055514	A1	19790529	CA 1975-234236		19750827
BE 832868	A1	19751216	BE 1975-159569		19750828
NL 7510199	A	19760302	NL 1975-10199		19750828
NL 166010	B	19810115			
NL 166010	C	19810615			
PRIORITY APPLN. INFO.:			JP 1974-99386	A	19740828
			JP 1974-129295	A	19741109

AB Abietic acid anhydride and tetrahydro-, Δ8-dihydro-, and dehydroabietic acid or their reactive derivs. reacted with RnC6H5-((CH2)mNH2 (R = NO2, Cl, MeO, EtO, Me, CF3, etc.; m = 0,1) to give the corresponding abietamides. Thus, Δ8-dihydroabietic acid chloride was treated with 2,6-Me2C6H3NH2 to give 80% N-(2,6-dimethylphenyl)-Δ8-dihydroabietamide (I). Among 24 abietamides prepared I, N-(2,4,6-trimethylphenyl)dihydroabietamide, and N-(4-chlorobenzyl)-Δ8-dihydroabietamide decreased blood cholesterol level in rats when fed at >0.003% concns. in food.

IT 59861-20-0P 59861-21-1P 59861-25-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 1740-19-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with amines)

L49 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 12 May 1984
ACCESSION NUMBER: 1976:105851 CAPLUS Full-text
DOCUMENT NUMBER: 84:105851
ORIGINAL REFERENCE NO.: 84:17251a,17254a
TITLE: Abietamide derivatives
INVENTOR(S): Murai, Hiromu; Ohata, Katsuya; Enomoto, Hiroshi; Sempuku, Kenji; Kitaguchi, Koji; Fujita, Yokio; Yoshikuni, Yoshiaki; Kura, Kohei; Saito, Katsuhide; et al.
PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
SOURCE: Ger. Offen., 11 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

DE 2519943	A1	19751204	DE 1975-2519943	19750505
DE 2519943	B2	19770707		
JP 50151859	A	19751206	JP 1974-55758	19740517
JP 52002910	B	19770125		
ES 437054	A1	19770116	ES 1975-437054	19750426
GB 1500017	A	19780208	GB 1975-18173	19750501
AU 7581011	A	19761111	AU 1975-81011	19750509
NL 7505521	A	19751119	NL 1975-5521	19750511
NL 165931	B	19810115		
NL 165931	C	19810615		
US 4210671	A	19800701	US 1975-576303	19750512
DK 7502110	A	19751118	DK 1975-2110	19750514
BE 829145	A1	19750901	BE 1975-156413	19750515
SE 7505595	A	19751118	SE 1975-5595	19750515
SE 425850	B	19821115		
SE 425850	C	19830224		
DD 119219	A5	19760412	DD 1975-186068	19750515
CH 610294	A5	19790412	CH 1975-6279	19750515
FR 2270854	A1	19751212	FR 1975-15431	19750516
FR 2270854	B1	19800125		
ZA 7503180	A	19760428	ZA 1975-3180	19750516
CA 1034594	A1	19780711	CA 1975-227171	19750516
AT 7503764	A	19790615	AT 1975-3764	19750516
AT 354469	B	19790110		

PRIORITY APPLN. INFO.: JP 1974-55758 A 19740517

OTHER SOURCE(S): MARPAT 84:105851

AB About 30 N-alkyl-, -alkenyl-, -cycloalkyl-, or -arylabietamides, useful as anticholesteremics, were prepared by treating the parent acid, its acid chloride, or its anhydride with the appropriate amine. Thus, 3.06 g tetrahydroabietic acid was treated with excess SOCl2 and the acid chloride treated with 3.22 g PhCH2NH2 to give 3.01 g N-benzyltetrahydroabietamide.

IT 58508-46-6P 58508-50-2P 58508-58-0P
58508-59-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 1740-19-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with amines)

L49 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 12 May 1984
ACCESSION NUMBER: 1972:94761 CAPLUS Full-text
DOCUMENT NUMBER: 76:94761
ORIGINAL REFERENCE NO.: 76:15213a,15216a
TITLE: Antiarrhythmic effect of diethylamino ethylamide of dehydroabietic acid (compound E-25), quinidine, and procaine amide in k-strophanthin-induced arrhythmia in anesthesized dogs
AUTHOR(S): Vrbovsky, L.
CORPORATE SOURCE: Ustav Exp. Farmakol., Slov. Akad. Ved, Bratislava, Czech.
SOURCE: Bratislavske Lekarske Listy (1971), 56(2), 161-79
CODEN: BLLIAX; ISSN: 0006-9248
DOCUMENT TYPE: Journal
LANGUAGE: Slovak

AB K-strophanthin (I)-induced ventricular tachycardia in dogs (4 groups, 10 each, 0.15 mg I/kg, i.v.) was reversed to sinus rhythm in 60% of the dogs after i.v. injection of dehydroabietic acid diethylaminoethylamide (II) [27527-13-5] (5

mg/kg), in 30% after i.v. quinidine [56-54-2], and in 10% after i.v. procaine amide [51-06-9] (with each treatment given every 5 min). The high ventricular rate caused by I was decreased gradually with successive administration of the above drugs and the frequency of renewed sinus rhythm did not differ significantly from its initial value.

IT 27527-13-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antiarrhythimic activity of)

L49 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 22 Apr 2001
ACCESSION NUMBER: 1964:9930 CAPLUS Full-text
DOCUMENT NUMBER: 60:9930
ORIGINAL REFERENCE NO.: 60:1801b-h,1802a-d
TITLE: Stereochemistry in the agathic acid series
AUTHOR(S): Bory, Sonia; Fetizon, Marcel; Laszlo, Pierre
CORPORATE SOURCE: Inst. Chim. Substances Nat., Gif-sur-Yvette
SOURCE: Bulletin de la Societe Chimique de France (1963), (10), 2310-22
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.

AB Study of the side chain of agathic acid (I) (R = R' = H) (Ia) indicates the trans-configuration for the methylhydrogen. The isoagathic acid (II) of Ruzicka and Hosking (CA 25, 1232), arising from the acid-catalyzed cyclization of Ia, has the structure and stereochemistry 8β-methyl,Δ12 (not Δ13). The rotatory dispersions, circular dichroisms, mass spectra, and nuclear magnetic resonance of a large number of related compds. are described and discussed. To a solution of 591 mg. I (R = R' = Me) in 10 ml. Et2O at 0° was added 1.1 g. LiAlH4 suspended in 15 ml. ether and the mixture left overnight at room-temperature The product (502 mg.) chromatographed on 15 g. alumina (grade I) and eluted with ligroine-ether (3: 1) gave agathadiol, m. 104-5° (ether-ligroine), [α]D 35.5° (c 0.45, CHCl3, in which solvent all rotations were measured), v 3600, 1637, 888, and 1022 cm.-1 (OH, C:C, C:CH2, and C-O, resp.). I (R = R' = Me) (1.076 g.) in 20 ml. 98% H CO2H was kept at 70 ° for I hr., HCO2H removed, and the residual product refluxed 3 hrs. with ethanolic N-KOH to give 525 mg. II (R = R' = Me) (III) as a neutral fraction, m. 121° (MeOH), [α]D 8.8° (c 0.92), v 1730, 1435, 1389, 1232, 1188, 1159 (intense), 1149, 805 cm.-1; 560 mg. of an acidic fraction was also obtained. I (R = Me, R' = H) (19.2 g.) and 100 ml. HCO2H was kept 1 hr. at 70° to give an acidic fraction (19 g.), esterified by refluxing in 180 ml. MeOH containing 10 ml. H2SO4. There was obtained 9.8 g. of a neutral fraction and 6.9 g. of an acidic fraction. The latter (II R = Me, R' = H) m. 187-95°, v 1733, 1704 cm.-1 With CH2N2 in Et2O was formed III, m. 121°, identical with the authentic diester. Hydrogenation of 2.617 g. III in 22 ml. HOAc at 80 kg./cm.2 for 6 hrs. in the presence of PtO2 gave IV (R = Me, R' = H) (V), m. 160-2° (aqueous MeOH), [α]D 12.6° (c 1.5), v 1730, 1706, 1233, 1189, 1156, 1147 (intense) cm.-1 Methylation with CH2N2 gave IV (R = R' = Me), m. 108-9°, [α]D 9.5° (c 0.85), v 1733, 1236, 1189, 1161 (intense) cm.-1 To MgMgI (from 0.75 g. and 2.5 ml. MeI in 20 ml. Et2O) was added 2.5 g. anhydrous CdCl2 in small portions and the mixture refluxed 45 min. The Michler's ketone test being negative, the Et2O was replaced by 10 ml. C6H6 and to the solution was added the acid chloride from 3.6 g. V (prepared using 10 ml. oxalyl chloride). After refluxing for I hr. the neutral fraction of the product was chromatographed on alumina (grade III) and eluted with ligroine-benzene (19:1) to give Me 8β,13β-dimethyl-14β-acetyl-4β-podocarpanoate (VI), m. 142-3° (MeOH), [α]D 45° (c 1.0), v 1727, 1709, 1351, 1233, 1186, 1155 cm.-1 VI was recovered unchanged after heating

with MeOH-KOH for 18 hr. VI (1.566 g.) in 15 ml. CH_2Cl_2 was kept with a solution of trifluoroperacetic acid (from 3 ml. trifluoroperacetic anhydride and 0.4 ml. H_2O_2 in 10 ml. CH_2Cl_2) at 4° for 18 hrs. Chromatography of the crude product on alumina (grade I) gave Me 8β,13β-dimethyl-14β-acetoxy-4β-podocarpanoate (VII), m. 157-9° (aqueous MeOH), [α]D 25° (c 1.0), ν 1730, 1370, 1238, 1190, 1155 cm.-1 When heated in 10 ml. 10% ethanolic KOH for 3 hrs., 255 mg. VII gave, after chromatography, the 14β-hydroxy-4β-podocarpanoate (VIII), m. 143-4° (aqueous MeOH), [α]D 14° (c 0.17), ν 1733, 1232, 1190, 1155, 1067, 3670 cm.-1 Oxidation of 129 mg. VIII with 81 mg. CrO_3 in 3 ml. HOAc gave Me 8β,13α-dimethyl-14-oxo-4β-podocarpanoate (IX), m. 118-19°, [α]D 50.8° (c 1.2), ν 1735, 1715, 1232, 1193, 1155 cm.-1 To 2.2 g. V in 60 ml. Et_2O was added 30 ml. of a LiMe solution (made by reaction of 3 g. Li and 34 g. MeI in 65 ml. Et_2O, filtration, and dilution to 100 ml.) under N; stirring 2 hrs. at room temperature and leaving overnight gave 2.03 g. X (R = H), m. 214-16° (MeOH), [α]D 23° (c 0.82), ν 1713, 1357 cm.-1 X (R = Me) m. 130-2° (MeOH), [α]D 16° (c 0.82), ν 1736, 1698, 1350, 1186, 1161 cm.-1 II (R = Me, R' = H) (1.5 g.) was heated at 290° and 14 mm. for 15 min. The neutral fraction purified by chromatography (alumina grade I, eluant 49:1 ligroine-ether) gave Me 8β,13-dimethyl-13(14)-podocarpen-4βoate (XI), m. 88-9° (MeOH), [α]D -27° (c 1.01), ν 1733, 1232, 1192, 1168, 1152, 1139 cm.-1 (purified by gas chromatography). XI was isomerized by refluxing for 1 hr. in 98% HCO_2H to give Me 8β,13-dimethyl-12(13)-podocarpen-4β-oate (XII), m. 116-18° (MeOH), [α]D 70° (c 0.77), ν 1733, 1235, 1193, 1170, 1149, 747 cm.-1 Hydrogenation of XI in HOAc (PtO_2 at atmospheric press.) gave Me 8β,13β-dimethyl-β-podocarpanoate, m. 82-3° (MeOH), [α]D 32° (c 0.31), ν 1733, 1237, 1195, 1171, 1159 cm.-1 XII (292 mg.), 15 ml. $CHCl_3$ and 350 mg. p-nitroperbenzoic acid (XIII) left at room-temperature for 6 hrs. gave crude Me 8β,13βdimethyl-12α,13α-epoxy-4β- podocarpanoate, which could not be purified [no reaction with $C(NO)_4$]. Treatment of 320 mg. crude epoxide in 30 ml. C_6H_6 with 0.3 ml. BF_3 etherate overnight gave, after purification, XIV, m. 112-3° (aqueous MeOH), [α]D -1° (c 1.48), ν 1730, 2840, 2725, 1229, 1190, 1150 cm.-1, together with Me 8β,13α-dimethyl-12-oxo- podocarpan-4β-oate, m. 137-9° (aqueous MeOH), [α]D 28° (c 1.2), ν 1730, 1715, 1428, 1236, 1195, 1170, 1159 cm.-1 Crude Me 8β,13β-dimethyl-13α,14α-epoxy-4β- podocarpanoate (558 mg.) (XV) was prepared by treatment of 485 mg. XI with 600 mg. XIII for 6 hrs. at room-temperature XV (530 mg.) in 50 ml. dry C_6H_6 was kept with 0.3 ml. BF_3 etherate for 15 hrs. to give 509 mg. product, which was refluxed 3 hrs. with 12 ml. 10% ethanolic KOH to give X, m. 117-9°. Reduction of 255 mg. X with 257 mg. $NaBH_4$ in 10 ml. aqueous MeOH gave 250 mg. Me 8β,13α-dimethyl- 14β-hydroxy-4β-podocarpanoate (XVI), m. 165-7° (aqueous MeOH), [α]D 30.8° (c 1.23), ν 1730, 1229, 1189, 1155, 1059 cm.-1 Acetylation of XVI with Ac_2O-pyridine gave the 14β-acetoxy analog, m. 160-2° (aqueous MeOH), [α]D 55 (c 1.08), ν 1730, 1365, 1240, 1190, 1155 cm.-1 Structures were assigned to most of the infrared frequencies given. 49 references.

IT 17829-02-6, Labda-8(20),13-diene-15,19-dioic acid
(compds. related to, stereochemistry of)

IT 1857-24-5P, Labda-8(20),13-diene-15,19-diol
RL: PREP (Preparation)
(preparation of)

IT 17829-02-6, Labda-8(20),13-diene-15,19-dioic acid
(stereochemistry of)

L49 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
ED Entered STN: 22 Apr 2001
ACCESSION NUMBER: 1959:17423 CAPLUS
DOCUMENT NUMBER: 53:17423

ORIGINAL REFERENCE NO.: 53:3272b-g
TITLE: 6-Aryloxyacyldehydroabietic acid esters
INVENTOR(S): Hoehn, Willard M.
PATENT ASSIGNEE(S): G.D. Searle and Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2846463		19580805	US	

GI For diagram(s), see printed CA Issue.

AB I were prepared, where Ar is an aromatic radical of less than 9 C atoms and R is an aliphatic radical of less than 9 C atoms. The I are active as estrogenic agents and as agents which produce useful effects in the transport and metabolism of cholesterol (II), reduce the serum ratio of II to phospholipides, are useful in the treatment of hypercholesterolemia, and are active antibacterial agents. Me dehydroabietate 31.5 and p-ClC6H4OCH2COCl 20.5 in PhNO2 360 treated at 0-5° with AlCl3 26 parts during 15 min., the mixture stirred 1 hr. at 0-5°, kept 48 hrs. at 0-10°, poured into ice H2O 500, the PhNO2 layer washed with H2O 500 in 5 portions, 2% aqueous NaOH 200 in 2 portions, and with H2O until neutral, the PhNO2 steam distilled, the oily H2O-insol. product which remained separated, the product dried in C6H6 solution, the C6H6 evaporated, the crude product dissolved in a min. amount of 20% C6H6-petr. ether (III), the solution poured on SiO2 1500 in a column, impurities removed by washing the column successively with 30% C6H6-III 3200, 40% C6H6-III 800, 60% C6H6-III 800, 80% C6H6-III 1600, 90% C6H6-III 8500, C6H6 3600, and 2% EtOAc-C6H6 5400, the column eluted further with 2% EtOAc-C6H6 (principal fraction eluted), and the appropriate fractions combined and fractionated gave Me 6-(p-chlorophenoxyacetyl)dehydroabie tate, b0.02 220-5°, λ 260 mμ (ε 7000). The following I were prepared similarly [Ar, R, b.p./mm., λ (mμ), ε given]: 2-ClC6H4, Me, -, -, -; 4-BrC6H4, Et, 255-60°/0.02, 260, 7500; ClCH2, Me, m. 119-20°, -, -; 4,2-Me(MeO)C6H3, Me, 185-90°/0.04, 260, 9500; 4-EtOC6H4, Me, -, -, -; Ph, Me, 215-18°/0.04, 261, 10,100; 4-MeC6H4, Me, -, -, -.

IT 1740-19-8, Abietic acid, dehydro-
(derivs.)

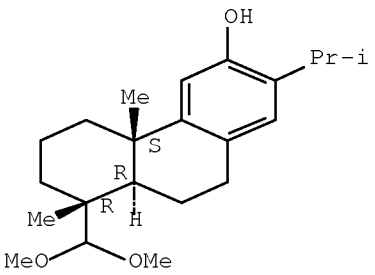
=> sel hit l49 1-22 rn
E839 THROUGH E865 ASSIGNED

FILE 'REGISTRY' ENTERED AT 15:28:01 ON 18 JUL 2008
L50 27 SEA FILE=REGISTRY ABB=ON PLU=ON (1740-19-8/BI OR 5835-26-7/BI OR 17829-02-6/BI OR 35928-32-6/BI OR 514-62-5/BI OR 59861-20-0/BI OR 59861-21-1/BI OR 108904-92-3/BI OR 120899-16-3/BI OR 120899-17-4/BI OR 120899-20-9/BI OR 120899-21-0/BI OR 120899-24-3/BI OR 13742-23-9/BI OR 1857-24-5/BI OR 22595-48-8/BI OR 26296-35-5/BI OR 27527-13-5/BI OR 3772-55-2/BI OR 5155-70-4/BI OR 57055-39-7/BI OR 58508-46-6/BI OR 58508-50-2/BI OR 58508-58-0/BI OR 58508-59-1/BI OR 59861-25-5/BI OR 864494-92-8/BI)

L50 ANSWER 1 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 864494-92-8 REGISTRY
ED Entered STN: 05 Oct 2005
CN 3-Phenanthrenol, 8-(dimethoxymethyl)-4b,5,6,7,8,8a,9,10-octahydro-4b,8-dimethyl-2-(1-methylethyl)-, (4bS,8R,8aR)- (CA INDEX NAME)
FS STEREOSEARCH
MF C22 H34 O3

SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

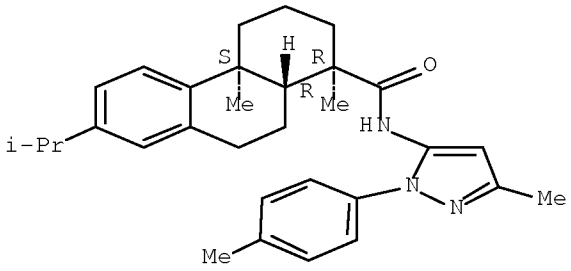
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:266831

REFERENCE 2: 143:311932

L50 ANSWER 2 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 120899-24-3 REGISTRY
ED Entered STN: 26 May 1989
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-[3-methyl-1-(4-methylphenyl)-1H-pyrazol-5-yl]-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C31 H39 N3 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



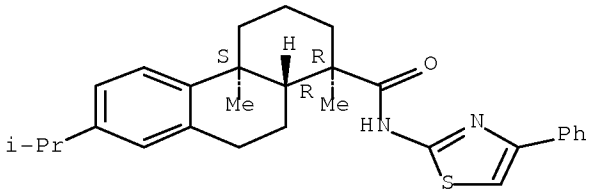
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:231929

L50 ANSWER 3 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 120899-21-0 REGISTRY
ED Entered STN: 26 May 1989
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-(4-phenyl-2-thiazolyl)-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H34 N2 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



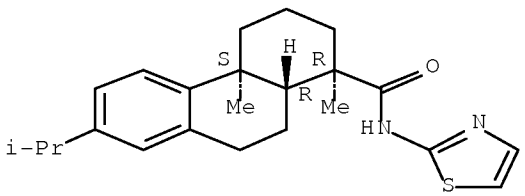
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:231929

L50 ANSWER 4 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 120899-20-9 REGISTRY
ED Entered STN: 26 May 1989
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-2-thiazolyl-, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-2-thiazolyl-, [1R-(1α,4aβ,10aα)]-
FS STEREOSEARCH
MF C23 H30 N2 O S
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry. Rotation (+).



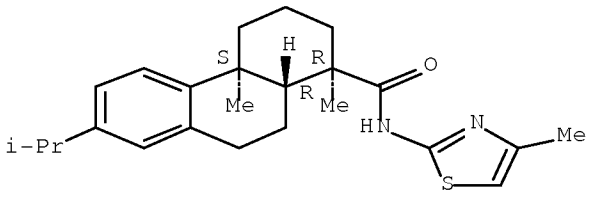
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:362548

REFERENCE 2: 110:231929

L50 ANSWER 5 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 120899-17-4 REGISTRY
ED Entered STN: 26 May 1989
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-(4-methyl-2-thiazolyl)-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H32 N2 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



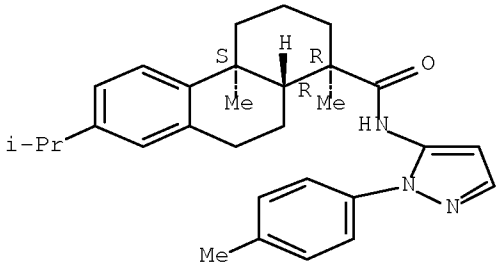
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:231929

L50 ANSWER 6 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 120899-16-3 REGISTRY
ED Entered STN: 26 May 1989
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-[1-(4-methylphenyl)-1H-pyrazol-5-yl]-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H37 N3 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



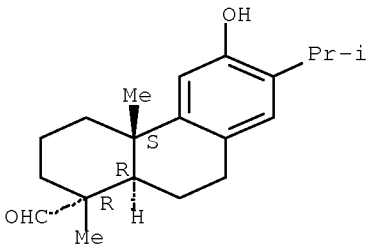
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 110:231929

L50 ANSWER 7 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 108904-92-3 REGISTRY
ED Entered STN: 28 Jun 1987
CN 1-Phenanthrenecarboxaldehyde, 1,2,3,4,4a,9,10,10a-octahydro-6-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxaldehyde, 1,2,3,4,4a,9,10,10a-octahydro-6-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
OTHER NAMES:
CN (+)-18-Oxoferruginol
CN 18-Oxoferruginol
FS STEREOSEARCH
MF C20 H28 O2
SR CA
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAPLUS, NAPRALERT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:311932

REFERENCE 2: 139:176733

REFERENCE 3: 128:45836

REFERENCE 4: 125:116985

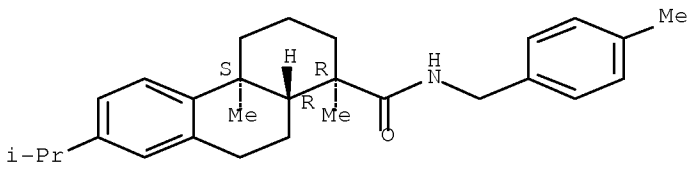
REFERENCE 5: 113:2017

REFERENCE 6: 110:230445

REFERENCE 7: 107:20742

L50 ANSWER 8 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 59861-25-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-[(4-methylphenyl)methyl]-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H37 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



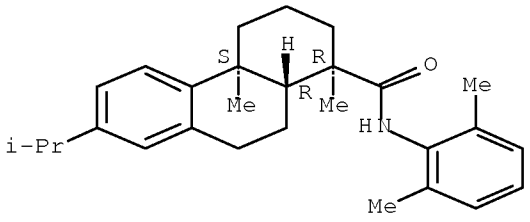
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 85:63202

L50 ANSWER 9 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 59861-21-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, N-(2,6-dimethylphenyl)-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H37 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

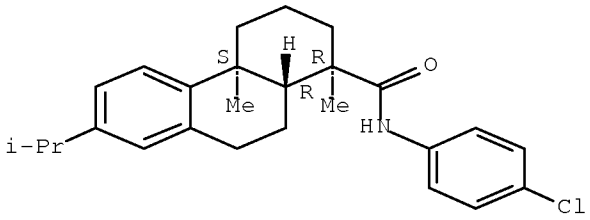
REFERENCE 1: 123:169930

REFERENCE 2: 88:7124

REFERENCE 3: 85:63202

L50 ANSWER 10 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 59861-20-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, N-(4-chlorophenyl)-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H32 Cl N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



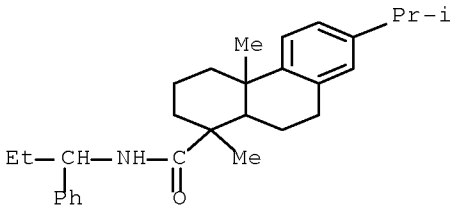
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 88:7124

REFERENCE 2: 85:63202

L50 ANSWER 11 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 58508-59-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-(1-phenylpropyl)- (CA INDEX NAME)
MF C29 H39 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)



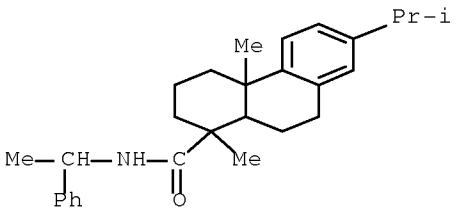
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 93:377

REFERENCE 2: 84:105851

L50 ANSWER 12 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 58508-58-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-N-(1-phenylethyl)- (CA INDEX NAME)
MF C28 H37 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

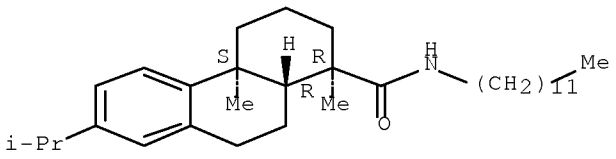
REFERENCE 1: 93:377

REFERENCE 2: 84:105851

L50 ANSWER 13 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 58508-50-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, N-dodecyl-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxamide, N-dodecyl-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
FS STEREOSEARCH

MF C32 H53 N O
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

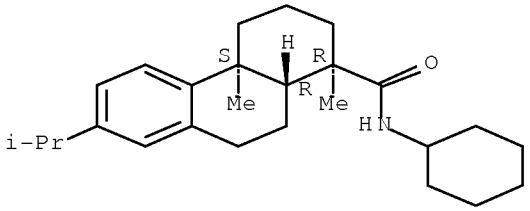
2 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 129:303265

REFERENCE 2: 84:105851

L50 ANSWER 14 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 58508-46-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, N-cyclohexyl-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H39 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

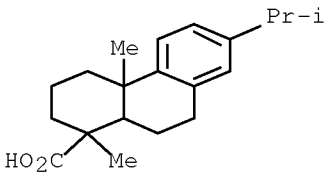
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 93:377

REFERENCE 2: 84:105851

L50 ANSWER 15 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 57055-39-7 REGISTRY

ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxylic acid, dichloro-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxylic acid, dichloro-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
OTHER NAMES:
CN Dichlorodehydroabietic acid
MF C20 H26 Cl2 O2
CI IDS
LC STN Files: AQUIRE, BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, PIRA, TOXCENTER, USPAT2, USPATFULL
Other Sources: DSL**
(**Enter CHEMLIST File for up-to-date regulatory information)



2 (D1—Cl)

30 REFERENCES IN FILE CA (1907 TO DATE)
30 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:24954

REFERENCE 2: 141:308737

REFERENCE 3: 141:308729

REFERENCE 4: 139:41301

REFERENCE 5: 139:41284

REFERENCE 6: 137:358082

REFERENCE 7: 129:85555

REFERENCE 8: 124:281459

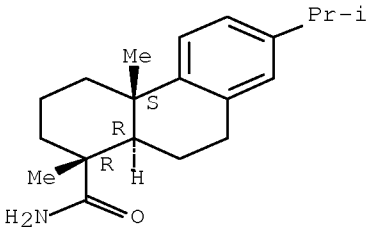
REFERENCE 9: 121:90787

REFERENCE 10: 120:127051

L50 ANSWER 16 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 35928-32-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxamide, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
CN Podocarpa-8,11,13-trien-15-amide, 13-isopropyl- (7CI)
OTHER NAMES:
CN (+)-Dehydroabietamide
CN 13-Isopropylpodocarpa-8,11,13-trien-15-amide
CN Dehydroabietamide
CN Dehydroabietic amide
CN Dehydroabietyl amide
FS STEREOSEARCH
MF C20 H29 N O
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL, USPATOLD
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

20 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
20 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 148:554111

REFERENCE 2: 146:380136

REFERENCE 3: 133:43660

REFERENCE 4: 129:41247

REFERENCE 5: 121:107577

REFERENCE 6: 109:129380

REFERENCE 7: 98:138892

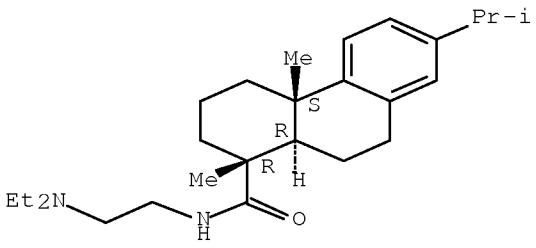
REFERENCE 8: 93:377

REFERENCE 9: 92:175065

REFERENCE 10: 88:122447

L50 ANSWER 17 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 27527-13-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxamide, N-[2-(diethylamino)ethyl]-
1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-,
[1R-(1α,4aβ,10aα)]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Podocarpa-8,11,13-trien-15-amide, N-[2-(diethylamino)ethyl]-13-
isopropyl- (8CI)
OTHER NAMES:
CN Dehydroabietic acid diethylaminoethylamide
FS STEREOSEARCH
MF C26 H42 N2 O
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 77:160082

REFERENCE 2: 76:94761

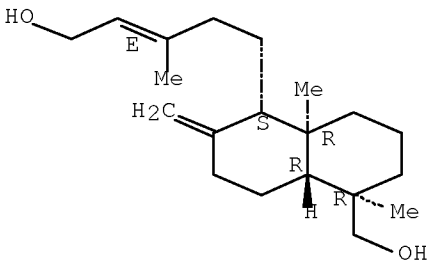
REFERENCE 3: 72:53491

REFERENCE 4: 60:45877

L50 ANSWER 18 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 26296-35-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Naphthalenemethanol, decahydro-5-[(3E)-5-hydroxy-3-methyl-3-penten-1-
yl]-1,4a-dimethyl-6-methylene-, (1R,4aR,5S,8aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Naphthalenemethanol, decahydro-5-(5-hydroxy-3-methyl-3-pentenyl)-
1,4a-dimethyl-6-methylene-, [1R-[1α,4aβ,5β(E),8a.alpha
.]]-
CN 1-Naphthalenemethanol, decahydro-5-[(3E)-5-hydroxy-3-methyl-3-
pentenyl]-1,4a-dimethyl-6-methylene-, (1R,4aR,5S,8aR)- (9CI)
CN Labda-8(20),13-diene-15,18-diol, (E)- (8CI)
OTHER NAMES:
CN 4-Epiagathadiol
CN Kayadiol

FS STEREOSEARCH
MF C20 H34 O2
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, NAPRALERT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1907 TO DATE)
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:139580

REFERENCE 2: 143:311932

REFERENCE 3: 139:176733

REFERENCE 4: 107:20742

REFERENCE 5: 93:182799

REFERENCE 6: 75:141009

REFERENCE 7: 75:121385

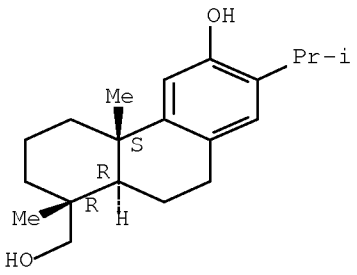
REFERENCE 8: 75:64021

REFERENCE 9: 74:10350

L50 ANSWER 19 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 22595-48-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,10a-octahydro-6-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,10a-octahydro-6-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
CN Abietinol, 6-hydroxydehydro- (4CI)
CN Abietyl alcohol, dehydro-6-hydroxy- (6CI)
CN Podocarpa-8,11,13-triene-12,15-diol, 13-isopropyl- (8CI)
OTHER NAMES:
CN 12-Hydroxydehydroabietinol

CN 13-Isopropylpodocarpa-8,11,13-triene-12,15-diol
FS STEREOSEARCH
MF C20 H30 O2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, USPATFULL, USPATOLD
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22 REFERENCES IN FILE CA (1907 TO DATE)
23 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 149:54114

REFERENCE 2: 146:317063

REFERENCE 3: 143:311932

REFERENCE 4: 139:194395

REFERENCE 5: 139:176733

REFERENCE 6: 136:170431

REFERENCE 7: 125:116985

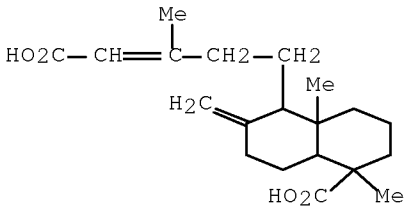
REFERENCE 8: 123:112443

REFERENCE 9: 119:266485

REFERENCE 10: 113:2017

L50 ANSWER 20 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 17829-02-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Naphthalenecarboxylic acid, 5-(4-carboxy-3-methyl-3-butenyl)decahydro-1,4a-dimethyl-6-methylene- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Naphthoic acid, 5-(4-carboxy-3-methyl-3-butenyl)decahydro-1,4a-dimethyl-6-methylene- (6CI, 8CI)
CN Labda-8(20),13-diene-15,19-dioic acid (7CI)

MF C20 H30 O4
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13 REFERENCES IN FILE CA (1907 TO DATE)
13 REFERENCES IN FILE CAPLUS (1907 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 71:61580

REFERENCE 2: 65:108201

REFERENCE 3: 65:108200

REFERENCE 4: 65:108199

REFERENCE 5: 65:65681

REFERENCE 6: 62:66699

REFERENCE 7: 62:30803

REFERENCE 8: 61:32645

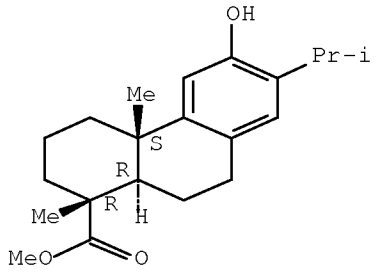
REFERENCE 9: 60:89989

REFERENCE 10: 60:23567

L50 ANSWER 21 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 13742-23-9 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-6-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, methyl ester, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-6-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, methyl ester, [1R-(1α,4aβ,10aα)]-
CN Abietic acid, 6-hydroxydehydro-, Me ester (4CI)
CN Abietic acid, dehydro-6-hydroxy-, methyl ester (6CI)
CN Podocarpa-8,11,13-trien-15-oic acid, 12-hydroxy-13-isopropyl-, methyl ester (8CI)
OTHER NAMES:
CN Methyl 12-hydroxydehydroabietate
CN NSC 146206

CN Torreyagrandate
FS STEREOSEARCH
DR 16981-52-5
MF C21 H30 O3
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, NAPRALERT, TOXCENTER, USPATFULL, USPATOLD
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

37 REFERENCES IN FILE CA (1907 TO DATE)
37 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 149:54114

REFERENCE 2: 146:317063

REFERENCE 3: 145:266831

REFERENCE 4: 143:311932

REFERENCE 5: 141:236615

REFERENCE 6: 139:176733

REFERENCE 7: 139:143346

REFERENCE 8: 125:116985

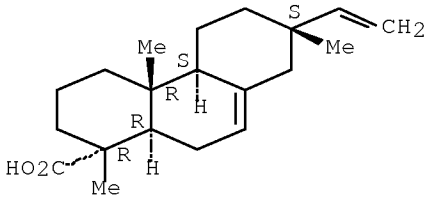
REFERENCE 9: 113:2017

REFERENCE 10: 111:115634

L50 ANSWER 22 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 5835-26-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxylic acid, 7-ethenyl-1,2,3,4,4a,4b,5,6,7,8,10,10a-dodecahydro-1,4a,7-trimethyl-, (1R,4aR,4bS,7S,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxylic acid, 7-ethenyl-1,2,3,4,4a,4b,5,6,7,8,10,10a-dodecahydro-1,4a,7-trimethyl-, [1R-(1α,4aβ,4bα,7.alph

a.,10aα)]-
CN Isopimaric acid (6CI)
CN Podocarp-7-en-15-oic acid, 13β-methyl-13-vinyl- (7CI)
CN Podocarp-7-en-15-oic acid, 13β-methyl-13-vinyl-, (-)- (8CI)
OTHER NAMES:
CN (+)-Isopimaric acid
CN Δ7,15-Isopimaric acid
CN 7,15-Isopimaradien-18-oic acid
CN Isopimaric acid A
FS STEREOSEARCH
DR 7201-52-7, 107631-59-4
MF C20 H30 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, MRCK*, NAPRALERT, PIRA, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

721 REFERENCES IN FILE CA (1907 TO DATE)
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
724 REFERENCES IN FILE CAPLUS (1907 TO DATE)
35 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 149:24954

REFERENCE 2: 148:576748

REFERENCE 3: 148:442466

REFERENCE 4: 148:386506

REFERENCE 5: 148:374094

REFERENCE 6: 148:361668

REFERENCE 7: 148:351251

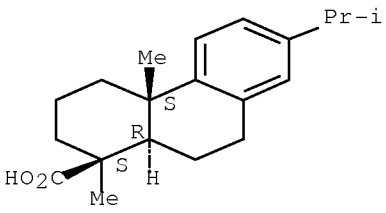
REFERENCE 8: 148:49811

REFERENCE 9: 148:44788

REFERENCE 10: 147:482935

L50 ANSWER 23 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 5155-70-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1S,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1S-(1α,4aα,10aβ)]-
CN Podocarpa-8,11,13-trien-16-oic acid, 13-isopropyl- (7CI, 8CI)
OTHER NAMES:
CN 4-epi-Dehydroabietic acid
CN 4-Epiabietic acid, dehydro-
CN 4-Epidehydroabietic acid
CN Callitrisic acid
CN Dehydro-4-epiabietic acid
FS STEREOSEARCH
DR 18045-62-0
MF C20 H28 O2
LC STN Files: AGRICOLA, AQUIRE, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, GMELIN*, NAPRALERT, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

37 REFERENCES IN FILE CA (1907 TO DATE)
37 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 146:518082

REFERENCE 2: 146:312767

REFERENCE 3: 145:45114

REFERENCE 4: 144:260040

REFERENCE 5: 143:172666

REFERENCE 6: 135:361665

REFERENCE 7: 134:219686

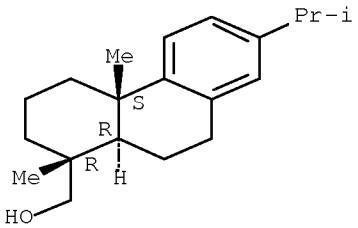
REFERENCE 8: 134:27513

REFERENCE 9: 132:47500

REFERENCE 10: 131:198770

L50 ANSWER 24 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 3772-55-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
CN Abietinol, dehydro- (4CI)
CN Abietyl alcohol, dehydro- (6CI)
CN Podocarpa-8,11,13-trien-15-ol, 13-isopropyl- (7CI, 8CI)
OTHER NAMES:
CN ar-Abietatrienol
CN Dehydroabeityl alcohol
CN Dehydroabietinol
CN Dehydroabietol
CN Dehydroabietyl alcohol
CN Pomiferin A
FS STEREOSEARCH
DR 19426-88-1
MF C20 H30 O
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, CHEMLIST, CSNB, NAPRALERT, PIRA, PROMT, SPECINFO, TOXCENTER, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

138 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
138 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 148:332936

REFERENCE 2: 148:233701

REFERENCE 3: 148:210289

REFERENCE 4: 147:381514

REFERENCE 5: 147:296090

REFERENCE 6: 147:143570

REFERENCE 7: 147:39157

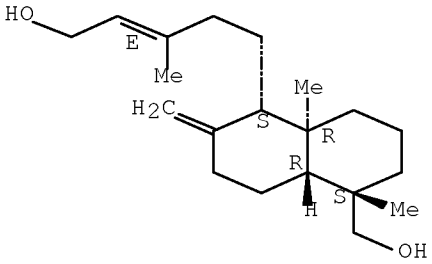
REFERENCE 8: 146:206483

REFERENCE 9: 146:77965

REFERENCE 10: 145:144784

L50 ANSWER 25 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 1857-24-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Naphthalenemethanol, decahydro-5-[(3E)-5-hydroxy-3-methyl-3-penten-1-yl]-1,4a-dimethyl-6-methylene-, (1S,4aR,5S,8aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Naphthalenemethanol, decahydro-5-(5-hydroxy-3-methyl-3-pentenyl)-1,4a-dimethyl-6-methylene-, [1S-[1α,4aα,5α(E),8a.beta.]]-
CN 1-Naphthalenemethanol, decahydro-5-[(3E)-5-hydroxy-3-methyl-3-pentenyl]-1,4a-dimethyl-6-methylene-, (1S,4aR,5S,8aR)- (9CI)
CN Labda-8(20),13-diene-15,19-diol (7CI)
CN Labda-8(20),13-diene-15,19-diol, (E)- (8CI)
OTHER NAMES:
CN (+)-Agathadiol
CN Agathadienediol
CN Agathadiol
CN Agathadiol, (+)-
CN Contortadiol
FS STEREOSEARCH
DR 25663-28-9
MF C20 H34 O2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, NAPRALERT, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

38 REFERENCES IN FILE CA (1907 TO DATE)
38 REFERENCES IN FILE CAPLUS (1907 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 148:73013

REFERENCE 2: 146:517247

REFERENCE 3: 145:372219

REFERENCE 4: 141:363254

REFERENCE 5: 141:292507

REFERENCE 6: 139:377893

REFERENCE 7: 132:44965

REFERENCE 8: 123:193670

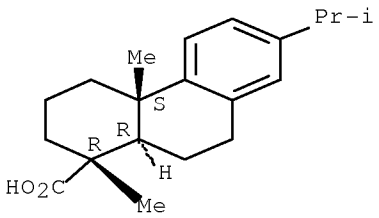
REFERENCE 9: 122:27772

REFERENCE 10: 109:208243

L50 ANSWER 26 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 1740-19-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, (1R,4aS,10aR)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1α,4aβ,10aα)]-
CN Abietic acid, dehydro- (6CI)
CN Podocarpa-8,11,13-trien-15-oic acid, 13-isopropyl- (7CI, 8CI)
OTHER NAMES:
CN (+)-Dehydroabietic acid
CN Abieta-8,11,13-trien-18-oic acid
CN Dehydroabietic acid
CN NSC 2952
FS STEREOSEARCH
DR 135577-73-0, 2501-27-1, 35949-24-7
MF C20 H28 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO,

CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NAPRALERT, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1557 REFERENCES IN FILE CA (1907 TO DATE)
69 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1561 REFERENCES IN FILE CAPLUS (1907 TO DATE)
34 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 149:85802

REFERENCE 2: 149:73965

REFERENCE 3: 148:576748

REFERENCE 4: 148:538683

REFERENCE 5: 148:538398

REFERENCE 6: 148:538393

REFERENCE 7: 148:518370

REFERENCE 8: 148:509073

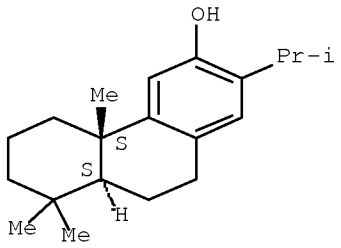
REFERENCE 9: 148:497912

REFERENCE 10: 148:466635

L50 ANSWER 27 OF 27 REGISTRY COPYRIGHT 2008 ACS on STN
RN 514-62-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN 3-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-2-(1-methylethyl)-, (4bS,8aS)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-2-(1-methylethyl)-, (4bS-trans)-
CN Ferruginol (6CI)

CN Podocarpa-8,11,13-trien-12-ol, 13-isopropyl- (7CI, 8CI)
OTHER NAMES:
CN (+)-Ferruginol
CN Ferruginol (Podocarpus)
FS STEREOSEARCH
MF C20 H30 O
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, EMBASE, IPA, NAPRALERT, PIRA, PROUSDDR, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

333 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
334 REFERENCES IN FILE CAPLUS (1907 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 149:54114

REFERENCE 2: 148:593025

REFERENCE 3: 148:593024

REFERENCE 4: 148:555554

REFERENCE 5: 148:555504

REFERENCE 6: 148:511066

REFERENCE 7: 148:491004

REFERENCE 8: 148:444885

REFERENCE 9: 148:421587

REFERENCE 10: 148:419511

FILE 'CAOLD' ENTERED AT 15:28:41 ON 18 JUL 2008

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

L51 98 S L50

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI composition of turpentine and resin acid in Benguet pine stump heartwood
IT 79-54-9 123-35-3 127-91-3 471-77-2 514-10-3
555-10-2 586-62-9 1945-53-5 2221-97-8 7201-52-7

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):49

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI gas-chromatographic study of the separation of resin acid methyl esters on a QF-1 column
IT 79-54-9 471-74-9 471-77-2 514-08-9 514-10-3
1231-35-2 1945-53-5 2761-77-5 5835-26-7
107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI thermal behavior of certain resin acids
IT 79-54-9 471-77-2 514-10-3 1945-53-5 5835-26-7
7201-52-7 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI oxygen absorption by gum rosin, modified gum rosins, and rosin acids
IT 5155-70-4 5835-26-7 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI starch adhesives (cold water-soluble)
IT 480-20-6 511-05-7 511-15-9 514-62-5
564-23-8 1603-47-0 4666-84-6 5150-31-2 5150-38-9
7181-79-5 7471-01-4 14259-45-1 29838-67-3

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI wood components - (I) infrared spectrometric identification of single resin acids in resin acid mixts.
IT 79-54-9 471-74-9 471-77-2 2221-97-8 2501-27-1
5673-40-5 5835-26-7 19402-30-3 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI conifer resin constituents
IT 79-54-9 471-74-9 511-05-7 511-15-9 640-28-8
1231-35-2 1438-65-9 1857-09-6 1857-11-0 1857-15-4
1857-21-2 1857-24-5 1908-44-7 1909-90-6
2761-77-5 4549-12-6 17829-02-6 106631-38-3

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI diterpenoids - (IV) structure and stereochem. of some polycyclic diterpenoids
IT 469-83-0 508-71-4 562-28-7 1224-42-6 2239-24-9
5835-26-7 5937-49-5 20784-69-4 41370-00-7 94681-67-1
106499-84-7 106974-66-7 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI determination of the conformation of the CH2OH and CH2OAc groups of terpenes by nuclear magnetic resonance
IT 465-99-6 1686-59-5 1686-60-8 1686-64-2 1686-65-3
3772-55-2 5672-32-2 22418-03-7 22425-78-1 34227-18-4
43127-93-1 53840-45-2 106598-96-3 107660-89-9 107822-43-5
107822-47-9

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI heartwood extractives of Pinus resinosa
IT 102-61-4 471-74-9 1012-12-0 5150-38-9 5835-26-7
6651-62-3 6689-43-6 10061-47-9 18001-44-0 18038-29-4
18042-24-5 18042-25-6 18052-65-8 18192-21-7 18536-68-0
18536-69-1 18748-91-9 18880-69-8 68745-38-0 94881-28-4
99788-45-1 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI stereochemistry in the agathic acid series
IT 1857-24-5 17829-02-6 43085-67-2 43085-69-4
72264-54-1 88658-29-1 105164-81-6 105598-99-0 106741-12-2
106741-13-3 106765-53-1 106765-61-1 106951-60-4 106951-61-5
106951-62-6 106953-60-0 107119-21-1 107631-64-1 107782-25-2
107782-27-4 108058-43-1

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI heartwood extractives of Pinus banksiana
IT 102-61-4 471-74-9 498-81-7 537-40-6 548-82-3
5150-38-9 5835-26-7 14465-68-0 68745-38-0
107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI preparation of dehydroabietane-1-amine
IT 35928-32-6 96367-98-5 100024-62-2 107740-16-9
107782-36-5

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI expts. directed toward the total synthesis of terpenes
IT 1224-30-2 4807-59-4 5835-26-7 101797-30-2
106298-11-7 106409-90-9 106712-95-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI structure of isopimaric acid
IT 1619-01-8 5835-26-7 99925-39-0 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI natural order Cupressales - (XXXVIII) structures of the diterpenes torulosol, torulosal, and agatholic acid
IT 1857-24-5 1908-44-7 25671-16-3 72401-52-6
100232-40-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI stereochemistry of the side-chains of diterpene esters

IT 1757-85-3 1857-24-5 15372-63-1 22343-28-8
28644-63-5 72264-54-1 97017-02-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI stereochemistry of pimaric and isopimaric acids
IT 127-27-5 3737-85-7 5835-26-7 96931-00-9
107631-59-4 107664-30-2 107782-30-9

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI synthesis of abietic acid from dehydroabietic acid
IT 1740-19-8 106743-16-2 115100-79-3

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI cellulose - (I) influence of moisture on the infrared spectrum of cellulose
IT 1740-19-8 1945-53-5

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI chromatographic analysis of resinous acids in the resin of the common pine
IT 471-74-9 1740-19-8 1945-53-5

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI synthesis of two stereoisomers of dehydroabietic acid
IT 1235-74-1 1740-19-8 6328-22-9 26823-16-5
68480-22-8 69574-21-6 95946-49-9 108247-03-6 110936-78-2
111294-89-4 111497-52-0 111583-88-1 114001-26-2 114999-92-7
114999-93-8 114999-97-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI nuclear magnetic resonance spectra of resin acids
IT 1235-74-1 1686-62-0 1945-53-5 3730-56-1 5673-36-9
5835-26-7 17611-11-9 27216-04-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI nature of resin acids and properties of rosins from oleoresins from Pinus massoni-ana
IT 1740-19-8 1945-53-5 27216-04-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI Podocarpaceae - (IV) constituents of the heartwood of Podocarpus dacrydioides
IT 511-05-7 514-62-5 564-23-8 593-49-7
2162-53-0 15340-79-1 20254-33-5 24035-66-3 32630-75-4
32764-86-6 34539-84-9 66241-95-0 70094-75-6 109251-57-2
110570-58-6 113999-94-3 120297-55-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI aromatic hydroxy aldehydes
TI hydroxy aldehydes (aromatic)
TI o-vinyltoluene and indene
TI oxygenated resin acid derivs.
TI resin acid derivs. (oxygenated)
IT 13742-23-9 22595-48-8 61597-76-0 115911-97-2
116032-84-9

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI infrared spectra of natural products - (XII) triterpenoid and diterpenoid carboxylic acids
IT 465-74-7 465-99-6 481-22-1 631-69-6 1740-19-8

4339-72-4 10376-50-8 23423-85-0 25493-91-8 25576-27-6
27706-38-3 51348-64-2 109251-57-2 121291-12-1

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI stereochemistry of resin acid derivs.
IT 5835-26-7 31148-95-5 107276-09-5 107457-20-5
109652-57-5

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI decarboxylation in conjunction with autoxidn.
IT 1740-19-8

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI function of rosins and rosin derivs. in pressure-sensitive adhesives
IT 1740-19-8 27216-04-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI partial degration and reconstitution of podocarpic acid-novel method of hydrolysis of highly sterically hindered esters
IT 545-48-2 1740-19-8 3772-55-2 5951-84-8
70094-75-6 101577-12-2 103423-50-3 107418-94-0 107457-20-5
108395-86-4 109251-57-2 110570-58-6 110746-82-2 114159-02-3

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI dehydroabietic acid and derivs.
IT 1740-19-8 80538-37-0

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI ferruginol-type diterpenes and proton magnetic resonance characteristics of diterpenic substances
TI optical rotation and structure in the labdane series of diterpenoids
TI synthesis and stereochemistry of fichtelite-structure and stereochemistry of some reduction products of abietic-type resin acids
IT 468-68-8 468-81-5 468-82-6 510-98-5 511-01-3
511-02-4 511-03-5 640-28-8 640-29-9 1156-07-6
1235-39-8 1235-40-1 1235-76-3 1235-77-4 1408-33-9
1409-35-4 1412-99-3 1438-55-7 1438-62-6 1438-64-8
1616-86-0 1619-25-6 1757-81-9 1757-83-1 1757-85-3
1757-87-5 1857-24-5 1891-72-1 1908-44-7
1909-92-8 2761-77-5 3650-30-4 3954-67-4 3954-68-5
4176-94-7 4630-08-4 4966-16-9 5956-15-0 5957-33-5
6049-24-7 6138-92-7 6605-72-7 6605-74-9 6605-76-1
6713-91-3 6813-12-3 7292-96-8 10178-31-1 10178-32-2
10207-80-4 10266-75-8 10266-76-9 10266-77-0 10266-78-1
10266-80-5 10266-81-6 10266-82-7 10266-85-0 10266-89-4
10266-91-8 10266-96-3 10267-02-4 10267-04-6 10267-05-7
10267-06-8 10267-07-9 10267-08-0 10267-09-1 10267-10-4
10267-11-5 10267-12-6 10267-14-8 10267-15-9 10267-18-2
10267-19-3 10267-21-7 10267-22-8 10267-23-9 10267-24-0
10267-25-1 10267-26-2 10267-27-3 10267-28-4 10267-29-5
10267-30-8 10267-31-9 10267-32-0 10267-33-1 10267-34-2
10267-35-3 10267-36-4 10267-37-5 10267-38-6 10267-39-7
10305-15-4 10305-16-5 10314-36-0 10314-38-2 10314-40-6
10314-41-7 10314-42-8 10314-43-9 10314-44-0 10314-45-1
10314-46-2 10314-47-3 10314-48-4 10314-50-8 10314-52-0
10314-53-1 10314-56-4 10314-57-5 10314-59-7 10314-61-1
10314-62-2 10314-63-3 10314-69-9 10314-71-3 10314-72-4
10314-74-6 10314-75-7 10314-76-8 10314-77-9 10314-79-1
10314-80-4 10314-83-7 10314-84-8 10314-85-9 10314-86-0
10314-87-1 10314-95-1 10380-71-9 10395-31-0 10395-32-1

10395-33-2 10395-35-4 10395-36-5 10395-37-6 10395-38-7
10395-39-8 10395-41-2 10395-42-3 10395-43-4 10470-23-2
10470-24-3 10470-25-4 10470-31-2 10483-51-9 11015-78-4
13013-31-5 13346-05-9 13346-07-1 13383-62-5 13384-28-6
13384-46-8 13384-96-8 13456-36-5 13902-83-5 13902-98-2
14022-42-5 16633-28-6 17829-02-6 17904-64-2
19533-83-6 20404-55-1 22343-28-8 23963-10-2 24460-84-2
25490-89-5 25671-16-3 28644-60-2 33762-81-1 36052-45-6
53771-91-8 55881-96-4 93158-10-2 93158-29-3 93813-28-6
96749-49-4 97017-02-2 99831-26-2 99831-27-3 100028-48-6
100194-79-4 100194-80-7 100194-81-8 100232-35-7 100624-45-1
101296-75-7 102216-44-4 102444-58-6 103425-20-3 103476-93-3
106196-13-8 106196-16-1 106300-22-5 106631-38-3 107928-45-0

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI diterpenoid total synthesis, an A → B → C approach - (II) total synthesis of dl-sugiol and dl-ferruginol
IT 511-05-7 514-62-5 10219-83-7 10244-81-2
10438-42-3 93427-93-1 93759-31-0

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI nuclear magnetic resonance spectra of some diterpenes
IT 471-74-9 3407-20-3 3625-01-2 4807-69-6 5673-36-9
5673-40-5 5835-26-7 7201-52-7 7715-72-2
7715-73-3 7715-76-6 7715-77-7 17611-06-2 107631-59-4***

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI resin acids of the oleoresins of Pinus pithyusa and P. pallasiana and their hybrid
IT 471-77-2 1945-53-5 5835-26-7 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI extractives of Australian timbers - (VI) ebelin lactone
IT 471-74-9 1619-02-9 3407-24-7 3407-25-8 3407-26-9
3649-50-1 3649-51-2 3649-52-3 3649-54-5 3649-55-6
3649-56-7 3649-57-8 3649-58-9 3649-59-0 3649-60-3
3649-61-4 3649-62-5 3649-63-6 3649-64-7 3649-65-8
3649-66-9 3649-67-0 3649-68-1 3649-69-2 3649-70-5
3649-71-6 3649-72-7 3649-73-8 3649-76-1 3649-77-2
3649-78-3 3649-79-4 3676-31-1 3676-32-2 3771-88-8
3771-91-3 4807-69-6 5673-36-9 5673-40-5 5835-26-7
7715-72-2 13218-97-8 17611-06-2 105087-40-9 107579-44-2
107631-59-4 107632-30-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI diterpenes of pine barks - (II) structures of contortadiol, contortolal, and hydroxyepimanool
TI industrial synthesis of vitamin A
IT 1857-24-5 1908-44-7 3650-30-4 3650-31-5

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI mass spectrometric studies of diterpenes-carbodicyclic diterpenes
IT 465-92-9 468-82-6 596-84-9 640-28-8 640-29-9
1227-75-4 1227-93-6 1227-94-7 1231-33-0 1231-34-1
1231-73-8 1235-39-8 1235-40-1 1235-76-3 1235-77-4
1235-78-5 1238-98-8 1438-55-7 1438-56-8 1438-57-9
1438-59-1 1438-61-5 1438-62-6 1438-63-7 1438-65-9
1438-66-0 1438-67-1 1757-81-9 1757-83-1 1757-84-2
1757-85-3 1757-87-5 1757-89-7 1757-91-1 1757-92-2
1757-93-3 1757-94-4 1908-44-7 2124-93-8 2222-52-8

3866-18-0 5989-67-3 13256-49-0 13346-06-0 15372-65-3
17829-02-6 17904-64-2 19123-29-6 25671-16-3 26729-54-4
30987-48-5 72401-52-6 102444-58-6 106631-38-3 107894-86-0

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI components of Cupressus sempervirens resin - (I) communic acid, cupressic acid, and isocupressic acid
IT 1235-39-8 1857-24-5 1908-44-7 1909-87-1
1909-88-2 1909-90-6 1909-91-7 1909-92-8 1909-93-9
1909-96-2 1909-97-3 1909-98-4 1909-99-5 1910-05-0
1910-07-2 2761-77-5 3894-99-3 3895-01-0 3895-07-6
3954-67-4 3954-68-5 94681-67-1 100064-82-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI Agathis microstachya oleoresin
IT 1857-24-5 17829-02-6

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI hop constituents - (XIX) essential oil of the hop variety OW-153
TI reduction of the resin acids with LiAlH4 - (I) synthesis of dehydroabietane from dehydroabietic acid, (II) synthesis of 12-sulfamoyldehydroabietinol
IT 3772-55-2 17066-67-0 19407-28-4 28957-78-0
93541-59-4 97363-57-0 102289-99-6

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI hexane extractives of the outer bark of Cryptomeria japonica
IT 471-74-9 511-05-7 514-62-5 564-23-8

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI rule for the estimation of acidity consts. of cyclohexanecarboxylic acids
IT 471-74-9 1028-04-2 1235-75-2 1235-76-3 1235-77-4
3604-88-4 4153-91-7 4331-54-8 4586-72-5 4807-69-6
5155-70-4 5451-55-8 5835-26-7 5947-49-9
7112-20-1 7384-42-1 10254-68-9 13032-38-7 13032-41-2
19941-59-4 19941-61-8 57345-30-9 90374-82-6 91975-83-6
107631-59-4 112000-74-5

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI oxidation of 4-methylthymol, ferruginol, and totarol
IT 511-05-7 511-15-9 514-62-5 2539-02-8
20752-49-2 35786-94-8 62691-26-3 62716-38-5 86510-12-5
90334-28-4 91555-75-8 92036-38-9 95868-55-6 101379-15-1
105584-04-1

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI industrial use of oleoresin from Siberian cedar
IT 471-74-9 5835-26-7 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI paper chromatography of resin acids
IT 471-74-9 5835-26-7 107631-59-4

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI natural order Cupressales - (XLI) structure and stereochemistry of communic acid
IT 1156-07-6 1757-85-3 1857-24-5 3895-01-0
4028-80-2 5573-14-8 10266-89-4 13903-04-3 14027-05-5
24022-12-6 28762-80-3 31323-69-0 36052-45-6 89886-17-9
90374-82-6 93220-97-4 93603-18-0 94262-12-1 94328-13-9

94482-36-7 94931-70-1 95623-69-1 96708-73-5 105091-51-8
105255-37-6 106041-49-0 106954-71-6 107989-58-2

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI infrared spectra of resin acids
IT 471-74-9 1740-19-8

L51 98 ANSWERS CAOLD COPYRIGHT 2008 ACS on STN
TI synthesis of dl-9-isopimaradienes and revision of structures of isopimaric acid and rimuene
IT 5720-73-0 5835-26-7 6697-24-1 51958-85-1
92790-79-9 94681-67-1 95369-08-7 100175-51-7 107631-59-4

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

FILE 'MEDLINE' ENTERED AT 15:29:27 ON 18 JUL 2008

FILE 'BIOSIS' ENTERED AT 15:29:27 ON 18 JUL 2008
Copyright (c) 2008 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 15:29:27 ON 18 JUL 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.

L52 648 SEA ABB=ON PLU=ON L50
L53 6 SEA ABB=ON PLU=ON L52 AND (?ATHEROSCLER? OR (HEART OR CARDIOVASCULAR OR CARDIAC OR CARDIO VASCULAR)(3A)(DISEAS? OR DISORDER) OR ?LIPIDEMI? OR ?LIPIDAEMI? OR ?CHOLESTER?)
L54 4 DUP REM L53 (2 DUPLICATES REMOVED)

L54 ANSWER 1 OF 4 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2008202581 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 18267111
TITLE: Dehydroabietic acid, a phytochemical, acts as ligand for PPARs in macrophages and adipocytes to regulate inflammation.
AUTHOR: Kang Min-Sook; Hirai Shizuka; Goto Tsuyoshi; Kuroyanagi Kayo; Lee Joo-Young; Uemura Taku; Ezaki Yoichiro; Takahashi Nobuyuki; Kawada Teruo
CORPORATE SOURCE: Laboratory of Molecular Function of Food, Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University, Uji, Kyoto 611-0011, Japan.
SOURCE: Biochemical and biophysical research communications, (2008 May 2) Vol. 369, No. 2, pp. 333-8. Electronic Publication: 2008-02-11.
Journal code: 0372516. E-ISSN: 1090-2104.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200804
ENTRY DATE: Entered STN: 26 Mar 2008
Last Updated on STN: 23 Apr 2008
Entered Medline: 22 Apr 2008
AB Obesity is characterized by an enhanced infiltration of macrophages to adipose tissues, which is closely associated with the low-grade inflammatory state and obesity-related pathologies such as type 2 diabetes and cardiovascular diseases. We showed here that dehydroabietic acid (DAA) is a potent PPARalpha/gamma dual activator. Furthermore, we examined the anti-

inflammatory effects of DAA in stimulated macrophages and in the coculture of macrophages and adipocytes. DAA significantly suppressed the production of proinflammatory mediators such as MCP-1, TNF-alpha, and NO in stimulated RAW 264 macrophages and in the coculture of RAW 264 macrophages and 3T3-L1 adipocytes. These results suggest that DAA is a valuable medicinal and food component for improving inflammatory changes associated with obesity-related diabetes.

L54 ANSWER 2 OF 4 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 1996075391 EMBASE Full-text
TITLE: Wood-derived estrogens: Studies in vitro with breast cancer cell lines and in vivo in trout.
AUTHOR: Mellanen, Pirkko (correspondence); Lehtimaki, Jyrki; Makela, Sari; Santti, Risto
CORPORATE SOURCE: Institute of Biomedicine, University of Turku, Turku, Finland.
AUTHOR: Petanen, Tiina; Oikari, Aimo
CORPORATE SOURCE: Dept. of Biology and Environmerntal, University of Jyvaskyla, Jyvaskyla, Finland.
AUTHOR: Mannila, Erkki
CORPORATE SOURCE: Department of Chemistry, University of Jyvaskyla, Jyvaskyla, Finland.
AUTHOR: Bylund, Goran
CORPORATE SOURCE: Department of Biology, Abo Akademi University, Turku, Finland.
AUTHOR: Holmbom, Bjarne
CORPORATE SOURCE: Lab. of Forest Products Chemistry, Abo Akademi University, Turku, Finland.
AUTHOR: Mellanen, Pirkko (correspondence)
CORPORATE SOURCE: Institute Biomedicine, University of Turku, Turku, Finland.
SOURCE: Toxicology and Applied Pharmacology, (Feb 1996) Vol. 136, No. 2, pp. 381-388.
Refs: 28
ISSN: 0041-008X CODEN: TXAPA9
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
022 Human Genetics
003 Endocrinology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
052 Toxicology
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 25 Mar 1996
Last Updated on STN: 25 Mar 1996

AB The wood-derived compound, β-sitosterol (purity >90%), was shown to be estrogenic in fish. It induced the expression of the vitellogenin gene in the liver of juvenile and methyltestosterone- treated rainbow trout. Structural similarities to β-sitosterol not-withstanding, cholesterol, citrostadienol, β-sitostanol, and 5-androstene-3β,17β-diol, an estrogenic member of the androstenic steroid group, were inactive. An abietic acid mixture (37% abietic acid, 6% dehydroabietic acid, and a remainder of unknown compounds) showed slight hormonal activity in feed, but it was completely inactive when given intraperitoneally in implants. The estrogenic component of the abietic acid preparation was not identified. In addition to β-sitosterol and abietic

acid, several other wood-derived compounds including betulin, isorhapontigenin, isorhapontin, and pinosylvin were estrogenic in breast cancer cells (MCF-7 or T-47D). However, betulin and pinosylvin, available in sufficient amounts for in vivo testing, did not induce the expression of the vitellogenin gene. Differences in the primary sequences of human and fish estrogen receptors (hormone as well as DNA-binding regions) or uptake and metabolism of the compounds may explain the discrepancy between the two estrogen bioassays. Wood-derived compounds such as β-sitosterol, present in pulp and paper mill effluents, may account for the weak estrogenicity of debarking effluent seen at the vitellogenin expression bioassay.

L54 ANSWER 3 OF 4 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1978079264 EMBASE Full-text
TITLE: Hypocholesterolemic action of tricyclic diterpenoids in rats.
AUTHOR: Enomoto, H.; Yoshikuni, Y.; Yasutomi, Y.; et. al.
CORPORATE SOURCE: Res. Lab., Nippon Shinyaku Co., Ltd., Kyoto, Japan.
SOURCE: Chemical and Pharmaceutical Bulletin, (1977) Vol. 25, No. 3, pp. 507-510.
ISSN: 0009-2363 CODEN: CPBTAL
COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English

L54 ANSWER 4 OF 4 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1977196846 EMBASE Full-text
TITLE: Diterpene acids as larval growth inhibitors.
AUTHOR: Elliger, C.A.; Zinkel, D.F.; Chan, B.G.; Waiss Jr., A.C.
CORPORATE SOURCE: West. Reg. Res. Lab., ARS, US Dept. Agric., Berkeley, Calif. 94710, United States.
SOURCE: Experientia, (1976) Vol. 32, No. 11, pp. 1364-1366.
ISSN: 0014-4754 CODEN: EXPEAM
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English

FILE 'CAPLUS' ENTERED AT 15:42:31 ON 18 JUL 2008
L77 2 SEA ABB=ON PLU=ON L38 AND (LIPEMIA OR LIPAEMIA OR HYPERLIPEMIA OR HYPERLIPAEMIA OR ATHEROGEN? OR ATHEROMA OR ARTER?(3A)(FATTY STREAK))
L78 2 SEA ABB=ON PLU=ON L77 AND (TREAT? OR THERAP? OR PREVENT?)
L79 0 SEA ABB=ON PLU=ON L78 NOT L48

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 15:44:31 ON 18 JUL 2008
L80 0 SEA ABB=ON PLU=ON L52 AND (LIPEMIA OR LIPAEMIA OR HYPERLIPEMIA OR HYPERLIPAEMIA OR ATHEROGEN? OR ATHEROMA OR ARTER?(3A)(FATTY STREAK))

```
FILE 'CAPLUS' ENTERED AT 15:30:23 ON 18 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 15:30:23 ON 18 JUL 2008

FILE 'BIOSIS' ENTERED AT 15:30:23 ON 18 JUL 2008
Copyright (c) 2008 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 15:30:23 ON 18 JUL 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE 'WPIX' ENTERED AT 15:30:23 ON 18 JUL 2008
COPYRIGHT (C) 2008 THOMSON REUTERS

FILE 'JAPIO' ENTERED AT 15:30:23 ON 18 JUL 2008
COPYRIGHT (C) 2008 Japanese Patent Office (JPO)- JAPIO

FILE 'PASCAL' ENTERED AT 15:30:23 ON 18 JUL 2008
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2008 INIST-CNRS. All rights reserved.

FILE 'DISSABS' ENTERED AT 15:30:23 ON 18 JUL 2008
COPYRIGHT (C) 2008 ProQuest Information and Learning Company; All Rights Res
erved.

L55        2104 SEA ABB=ON  PLU=ON  ("JEONG T"? OR "TAE-SOOK J"?)/AU
L56       53393 SEA ABB=ON  PLU=ON  ("LEE W"? OR "WOO-SONG L"?)/AU
L57      153131 SEA ABB=ON  PLU=ON  ("KIM H"? OR "HYOUNG-CHIN, K"?)/AU
L58       33777 SEA ABB=ON  PLU=ON  ("CHOI Y"? OR "YANG-KYU C"?)/AU
L59        5092 SEA ABB=ON  PLU=ON  ("AN S"? OR "SO-JIN A"?)/AU
L60        1549 SEA ABB=ON  PLU=ON  ("IM K"? OR "KYOUNG-RAN I"?)/AU
L61        4131 SEA ABB=ON  PLU=ON  ("JANG K"? OR "KI-CHANG J"?)/AU
L62         118 SEA ABB=ON  PLU=ON  ("MOON O"? OR "OG-SUNG M"?)/AU
L63        5609 SEA ABB=ON  PLU=ON  ("SON J"? OR "JUN-SEOCK S"?)/AU
L64           2 SEA ABB=ON  PLU=ON  L55 AND L56 AND L57 AND L58 AND L59
                AND L60 AND L61 AND L62 AND L63
L65         444 SEA ABB=ON  PLU=ON  L55 AND ((L56 OR L57 OR L58 OR L59 OR
                L60 OR L61 OR L62 OR L63))
L66        2829 SEA ABB=ON  PLU=ON  L56 AND ((L57 OR L58 OR L59 OR L60 OR
                L61 OR L62 OR L63))
L67        4009 SEA ABB=ON  PLU=ON  L57 AND ((L58 OR L59 OR L60 OR L61 OR
                L62 OR L63))
L68         227 SEA ABB=ON  PLU=ON  L58 AND ((L59 OR L60 OR L61 OR L62 OR
                L63))
L69          12 SEA ABB=ON  PLU=ON  L59 AND ((L60 OR L61 OR L62 OR L63))
L70           8 SEA ABB=ON  PLU=ON  L60 AND ((L61 OR L62 OR L63))
L71           7 SEA ABB=ON  PLU=ON  L61 AND (L62 OR L63)
L72           2 SEA ABB=ON  PLU=ON  L62 AND L63
L73         237 SEA ABB=ON  PLU=ON  ((L55 OR L56 OR L57 OR L58 OR L59 OR
                L60 OR L61 OR L62 OR L63) OR (L65 OR L66 OR L67 OR L68))
                AND ((T OR TORREY?)(W) NUCIFER? OR CONIFER? OR (KAYA OR
                CONE(3A) BEAR?)(3A) TREE OR JAPANESE(1W) YEW)
L74           6 SEA ABB=ON  PLU=ON  L73 AND (?ATHEROSCLER? OR (HEART OR
                CARDIOVASCULAR OR CARDIAC OR CARDIO VASCULAR)(3A)(DISEAS?
                OR DISORDER) OR ?LIPIDEMI? OR ?LIPIDAEMI? OR ?CHOLESTER?)
```

L75 27 SEA ABB=ON PLU=ON L64 OR (L69 OR L70 OR L71 OR L72) OR L74
L76 20 DUP REM L75 (7 DUPLICATES REMOVED)

L76 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:813448 CAPLUS Full-text
TITLE: Fiber Bragg grating strain sensor using the spectral tag method
AUTHOR(S): Kim, Geun-Jin; Lee, Kyoung-Shin; Son, Ju-Youn; Youn, Jae-Soon; Choi, Ki-Sun; Baik, Se-Jong; Im, Kiegon
CORPORATE SOURCE: Department of Physics, Chonnam National University, Gwangju, 500-757, S. Korea
SOURCE: Sae Mulli (2008), 56(5), 422-425
CODEN: NWPYA4; ISSN: 0374-4914
PUBLISHER: Korean Physical Society
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB The spectral tag method is proposed to increase the multiplexing capability of a multipoint FBG sensor system. We fabricated six multiplexing Fiber Bragg grating (FBG) sensors employing four wavelengths. One of the multiplexing FBG sensors was subjected to a series of strains successively, and the resultant spectra showed a pair of spectral peaks moving toward longer wavelength. The slope sensitivity was calculated to be 0.99 pm/με.

L76 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:813446 CAPLUS Full-text
TITLE: Numerical analysis on the multiplexing of a fiber Bragg grating employing a spectral code
AUTHOR(S): Son, Ju-Youn; Choi, Ki-Sun; Kim, Geun-Jin; Lee, Kyoung-Shin; Park, Dong-Young; Youn, Jae-Soon; Baik, Se-Jong; Im, Kiegon
CORPORATE SOURCE: Department of Physics, Chonnam National University, Gwangju, 500-757, S. Korea
SOURCE: Sae Mulli (2008), 56(5), 418-421
CODEN: NWPYA4; ISSN: 0374-4914
PUBLISHER: Korean Physical Society
DOCUMENT TYPE: Journal
LANGUAGE: Korean
AB A multiplexing technique for fiber Bragg grating sensors is required for multipoint measurements such as smart structure applications. The spectral tag method can enhance the multiplexing capability in the Wavelength Division Multiplexing (WDM) approach without addnl. switching units. Each sensor is assigned with a unique spectral tag that represents a series of Bragg wavelengths. The maximum number of sensors in a single optical fiber is determined by the number of employed spectral codes and the number of constituent gratings. With a 0.4-nm peak-to-peak separation and a 5 % reflectance of the grating, we simulated the change caused in the multiplexed spectrum by the strain to determine the position of the sensor and to measure the degree of its change.

L76 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2007:1191195 CAPLUS Full-text
DOCUMENT NUMBER: 147:534664
TITLE: Flavonoids for the prevention and treatment of cardiovascular diseases
INVENTOR(S): Jeong, Tae Sook; Lee, Woo Song; Park, Ki Hun; Lee, Byong Won; Park, Yong Dae; Kim, Min Jung; An,

So Jin; Kim, Hyoung Chin; Moon, Og Sung; Won, Young Suk
PATENT ASSIGNEE(S): Korea Research Institute of Bioscience and Biotechnology, S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2007049812	A	20070514	KR 2005-106992	20051109

PRIORITY APPLN. INFO.: KR 2005-106992 20051109

AB A flavonoid-based compound is provided to show excellent antioxidative activity on low d. lipoprotein (LDL) and effectively inhibit the activity of acyl-CoA:cholesterol acyltransferase (ACAT), thereby being useful for preventing and treating cardiovascular diseases, such as hyperlipidemia, coronary heart disease, coronary sclerosis and myocardial infarction. The flavonoids are isolated from roots of Cudrania tricuspidata.

L76 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2007:1173357 CAPLUS Full-text
DOCUMENT NUMBER: 147:413029
TITLE: Health food composition for prevention and treatment of cardiovascular disease without side effects comprising extract of Lycopus lucidus turcz. capable of inhibiting activity of ACAT
INVENTOR(S): Jeong, Tae Sook; Lee, Woo Song; Park, Ho Yong; Im, Kyoung Ran; Park, Yong Dae; Kim, Min Jung; Han, Jong Min; Kim, Hyoung Chin; Moon, Og Sung; Won, Young Suk
PATENT ASSIGNEE(S): Korea Research Institute of Bioscience and Biotechnology, S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2007037429	A	20070404	KR 2006-108870	20061106
KR 2007107816	A	20071108	KR 2005-91930	20050930

PRIORITY APPLN. INFO.: KR 2005-91930 A3 20050930

AB A composition for the prevention and treatment of cardiovascular disease comprising the extract of Lycopus lucidus Turcz. is provided to inhibit synthesis and accumulation of cholesteryl ester by inhibiting activity of acyl-CoA:cholesterol acyltransferase(ACAT), and reduce side effects. The composition for the prevention and treatment of cardiovascular disease comprises the extract of Lycopus lucidus Turcz. as an effective ingredient, wherein the Lycopus lucidus Turcz. extract is obtained from leaf or root of Lycopus lucidus Turcz.; the Lycopus lucidus Turcz. extract is extracted with water or alc. such as methanol, ethanol or butanol; the cardiovascular disease

is hyperlipidemia or arteriosclerosis; and the composition is health food composition

L76 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1191194 CAPLUS Full-text
DOCUMENT NUMBER: 147:462262
TITLE: Novel catecholic xanthone-based compound and composition for preventing and treating cardiovascular diseases
INVENTOR(S): Jeong, Tae Sook; Lee, Woo Song; Park, Ki Hun; Lee, Byong Won; Han, Jong Min; Im, Kyoung Ran ; Kim, Min Jung; Kim, Hyoung Chin; Moon, Og Sung; Won, Young Suk
PATENT ASSIGNEE(S): Korea Research Institute of Bioscience and Biotechnology, S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2007049811	A	20070514	KR 2005-106991	20051109
KR 823155	B1	20080421		
PRIORITY APPLN. INFO.:			KR 2005-106991	20051109

AB A novel catecholic xanthone based-compound, an extract of Cudrania tricuspidata and a catecholic xanthone based-compound isolated therefrom are claimed. Said compound has excellent antioxidant activity on low-d. lipoprotein (LDL) and effectively inhibits the activity of acyl-CoA:cholesterol acyltransferase (ACAT) without showing acute toxicity in mice. The compound is thus useful as a composition for preventing and treating cardiovascular diseases. The method for preparing a novel catecholic xanthone compound (as represented by a certain formula; no data) comprises crushing washed and dried Cudrania tricuspidata and then extracting it with a solvent to provide an extract Said method comprises adding water to the extract to suspend it and fractionating it with n-hexane, chloroform and Et acetate in sequence to obtain a chloroform-soluble extract Said method comprises isolating and purifying a catecholic xanthone compound (as represented by a certain formula; no data) from the chloroform soluble extract through chromatog. More narrow definitions are indicated; however, specific chemical structures and/or addnl. information are not provided.

L76 ANSWER 6 OF 20 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 2007:87569 BIOSIS Full-text
DOCUMENT NUMBER: PREV200700093320
TITLE: Alcohol-fermented food or pharmaceutical composition for prevention of obesity and process for preparation thereof.
AUTHOR(S): Anonymous; Kim, Hyung-Min [Inventor]; Hong, Seung-Heon [Inventor]
CORPORATE SOURCE: Seoul, 130-716, South Korea
ASSIGNEE: Hyung-Min Kim
PATENT INFORMATION: US 07135199 20061114
SOURCE: Official Gazette of the United States Patent and

Trademark Office Patents, (NOV 14 2006)
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 31 Jan 2007
Last Updated on STN: 31 Jan 2007

AB The present invention relates to an extract of mixed herb medicine, and a pharmaceutical composition for the prevention and treatment of obesity containing the extract as an effective ingredient or health food containing the same, more precisely, an extract of mixed herb medicine extracted from the mixture of cassia seeds (Cassia obtusifolia L.), green tea (Thea sinensis L.), eucommia bark (Eucommia ulmoides Oliver), garlic (Allium sativum var. pekinense), hawthorn (Crataegus Pinnatifida Bunge), fresh pine needle (Pinus densiflora Siebold et Zuccarini) and wormwood (Artemisia capillaris Thunberg) using water or aqueous alcohol solution, a pharmaceutical composition for the prevention and treatment of obesity containing the above extract and a fermented extract extracted after adding rice, malt and yeast to the above mixture, or health food containing the same. The extract of the present invention can be effectively used for the prevention and the treatment of obesity by inhibiting weight gain by high-fat diet, lowering blood cholesterol and decreasing neutral fat (triglyceride).

L76 ANSWER 7 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2007-349769 [33] WPIX
DOC. NO. CPI: C2007-127532 [33]
TITLE: Composition for preventing hyperlipidemia and arteriosclerosis comprising terpenoid-based compound capable of effectively inhibiting acyl-coa: Cholesterol acyltransferase activity
DERWENT CLASS: B05
INVENTOR: CHO K H; IM K R; JEONG T S; KIM J R; LEE W S
PATENT ASSIGNEE: (KORE-N) KOREA RES INST BIOSCIENCE & BIOTECHNOLOG
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
KR 588358	B1	20060612	(200733)*	KO	[1]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
KR 588358 B1		KR 2006-36733	20060424

PRIORITY APPLN. INFO: KR 2006-36733 20060424
AN 2007-349769 [33] WPIX
AB KR 588358 B1 UPAB: 20070523
NOVELTY - A composition comprising a terpenoid compound is provided to effectively inhibit acyl-CoA:cholesterol acyltransferase, thereby being usefully used for preventing and treating cardiovascular disease induced by synthesis and accumulation of cholesteryl ester.
DETAILED DESCRIPTION - The composition for preventing hyperlipidemia and arteriosclerosis comprises at least one terpenoid-based compound represented by formulae(1) to (4) as an effective ingredient. The terpenoid-based compound is obtained by extracting Torreya nucifera with methanol, isolating and purifying the extract.(C) KIPO 2006Image 1/1

L76 ANSWER 8 OF 20 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2007-0010906 PASCAL Full-text
COPYRIGHT NOTICE: Copyright .COPYRGT. 2007 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Antioxidant activities of abietane diterpenoids isolated from Torreya nucifera leaves
AUTHOR: WOO SONG LEE; KIM Ju-Ryoung; HAN Jong-Min; KI CHANG JANG; SOK Dai-Eun; JEONG Tae-Sook
CORPORATE SOURCE: National Research Laboratory of Lipid Metabolism & Atherosclerosis, Korea Research Institute of Bioscience and Biotechnology, Daejeon 305-333, Korea, Republic of; National Institute of Subtropical Agriculture, R. D. A, Jeju 690-150, Korea, Republic of; College of Pharmacy, Chungnam National University, Daejeon 305-764, Korea, Republic of
SOURCE: Journal of agricultural and food chemistry : (Print), (2006), 54(15), 5369-5374, 36 refs. ISSN: 0021-8561 CODEN: JAFCAU
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-7332, 354000139016820240
AN 2007-0010906 PASCAL Full-text
CP Copyright .COPYRGT. 2007 INIST-CNRS. All rights reserved.
AB Investigation on antioxidant compounds from the ethanolic extracts of Torreya nucifera leaves resulted in the isolation of abietane diterpenoids, a known 18-methylesterferruginol (1) and a new 18-dimethoxyferruginol (2). The structures of compounds 1 and 2 were elucidated on the basis of their spectroscopic analyses. Compounds 1 and 2 inhibited the Cu.sup.2.sup.+-mediated, 2,2'-azobis(2-amidino-propane)hydrochloride-mediated and 3-morpholinosydnonimine-1-mediated low-density lipoprotein (LDL) oxidation in the thiobarbituric acid-reactive substances assay as well as the macrophage-mediated LDL oxidation. Compounds 1 and 2 exhibited the potent antioxidant activities in the conjugated diene production, relative electrophoretic mobility, and apoB-100 fragmentation on copper-mediated LDL oxidation. Compound 1 also suppressed nitric oxide production and inducible nitric oxide synthase expression in lipopolysaccharide-stimulated RAW264.7 cells.

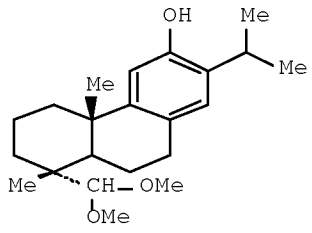
L76 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2005:1001814 CAPLUS Full-text
DOCUMENT NUMBER: 143:311932
TITLE: Novel abietane diterpenoid compounds from Torreya nucifera for prevention and treatment of cardiovascular disease
INVENTOR(S): Jeong, Tae-Sook; Lee, Woo-Song ; Kim, Hyoung-Chin; Choi, Yang-Kyu; Kim, Ju-Ryoung; An, So-Jin ; Im, Kyoung-Ran; Jang, Ki-Chang ; Moon, Og-Sung; Son, Jun-Seock
PATENT ASSIGNEE(S): Korea Research Institute of Bioscience and Biotechnology, S. Korea; Jeong, Tae-Sook; Lee,

Woo-Song; Kim, Hyoung-Chin; Choi, Yang-Kyu; Kim, Ju-Ryoung; An, So-Jin; Im, Kyoung-Ran; Jang, Ki-Chang; Et Al.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005084141	A2	20050915	WO 2005-KR472	20050222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2006073751	A	20060629	KR 2004-112140	20041224
KR 2006043067	A	20060515	KR 2005-14523	20050222
JP 2007526299	T	20070913	JP 2007-501703	20050222
US 20070190192	A1	20070816	US 2006-591282	20060831
KR 2007041484	A	20070418	KR 2007-30866	20070329
KR 772495	B1	20071101		

PRIORITY APPLN. INFO.:
KR 2004-14236 A 20040303
KR 2004-89372 A 20041104
KR 2004-112140 A 20041224
KR 2005-14523 A3 20050222
WO 2005-KR472 W 20050222

GI



I

AB The present invention relates to a composition for the prevention and the treatment of cardiovascular disease containing exts. of T. nucifera or abietane diterpenoid compound or terpenoid compound isolated from the same as

an effective ingredient. T. nucifera exts. or abietane diterpenoid compound or terpenoid compound isolated from the same of the present invention not only shows excellent anti-oxidative activity to LDL but also effectively inhibits ACAT activity. Further, T. nucifera exts. of the present invention reduce blood LDL cholesterol and total cholesterol. Compds. isolated from T. nucifera include I, ferruginol, 18-hydroxyferruginol, isopimaric acid, dehydroabietinol, and kayadiol.

L76 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2004:965489 CAPLUS Full-text
DOCUMENT NUMBER: 141:408326
TITLE: Method and kit for diagnosing foot and mouth disease virus (FMDV) using FMDV-derived recombinant antigen in sandwich or competition assay
INVENTOR(S): Cho, In-Soo; Hyun, Bang-Hun; Lee, Kwang-Nyeong; Oem, Jae-Ku; Kye, Soo-Jeong; Ko, Young-Joon; Ku, Bok-Kyung; Joo, Yi-Seok; An, Soo-Hwan; Kim, In-Joong; Kim, Ok-Kyung; Kim, Hee-Jeong; Jang, Ki-Yong; Shin, Nam-Kyu; Hwang, Suh-Ha; Kang, Je-Mo; Kim, Chang-Ho; Ko, Song-Woo
PATENT ASSIGNEE(S): Republic of Korea, National Veterinary Research and Quarantine Service, S. Korea; Princeton Biomeditech East, Inc.; Princeton Biomeditech Corporation
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004097418	A1	20041111	WO 2003-KR896	20030506
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2004095824	A	20041116	KR 2003-26809	20030428
CA 2523939	A1	20041111	CA 2003-2523939	20030506
AU 2003230254	A1	20041123	AU 2003-230254	20030506
EP 1618381	A1	20060125	EP 2003-723414	20030506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1798976	A	20060705	CN 2003-826670	20030506
BR 2003018312	A	20060711	BR 2003-18312	20030506
US 20060127885	A1	20060615	US 2004-833933	20040428
US 20070128587	A1	20070607	US 2006-555059	20060915
PRIORITY APPLN. INFO.:			KR 2003-26809 A	20030428
			WO 2003-KR896 W	20030506

AB The present invention provides a method for diagnosing foot- and -mouth disease virus (FMDV) which allowed to distinguish between FMDV vaccinated animals and an infected animal with only a small volume of test sample by using FMDV-derived antigen in sandwich or competition assay. The comprises the steps of applying a predetd. amount of a test sample to a loading region of a strip; coupling a detection reagent including a given labeling reagent to an analyte of interest in the test sample to form a complex there-between; developing the complex onto a wicking membrane; and observing changes in appearance of a reactivity zone having at least more than one immobilized phase selected from antigen, antibody or hapten on the predetd. region of the wicking membrane, derived from FMDV or obtainable from FMDV through an immunol. reaction to determine the presence or absence of foot- and -mouth disease virus infection. It also provides a kit for diagnosing foot- and -mouth disease virus infection comprising a strip including a reactivity zone containing at least more than one immobilized phase selected from antigen, antibody or hapten thereon, derived from FMDV or obtainable from FMDV through an immunol. reaction, and a control zone for confirming normal operation of the kit, provided on a predetd. region of a wicking membrane; and a housing protecting the strip from a variety of contaminants, and including at least a test sample application port and an indicia window for observing results of reaction in the reactivity zone and the control zone on the strip. Cloning of FMDV-derived antigens in Escherichia coli was demonstrated. The accuracy of the test of the invention was demonstrated using cattle, swine, goat and sheep sera.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 11 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-623681 [59] WPIX
CROSS REFERENCE: 2005-169160; 2005-173408
DOC. NO. CPI: C2003-170508 [59]
TITLE: Manufacturing method of long-fiber corduroy textile
DERWENT CLASS: F03
INVENTOR: IM K; LIM G H; OH J; OH J G; SHON J; SON J I; YEO S; YEO S M
PATENT ASSIGNEE: (SAEH-N) SAEHAN IND INC
COUNTRY COUNT: 33

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
KR 2003036445	A	20030509	(200359)*	KO	[0]	
EP 1464744	A2	20041006	(200465)	EN		
CN 1536115	A	20041013	(200508)	ZH		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
KR 2003036445	A	KR 2003-21086	20030403
CN 1536115	A	CN 2003-138644	20030529
EP 1464744	A2	EP 2003-293352	20031231

PRIORITY APPLN. INFO: KR 2003-21086 20030403
AN 2003-623681 [59] WPIX
CR 2005-169160; 2005-173408
AB KR 2003036445 A UPAB: 20050706

NOVELTY - A manufacturing method of long-fiber corduroy textile is characterized by involving a reducing process after weaving a corduroy structure, forming a space between ground yarn and pile yarn and passing a knife between the ground yarn and the pile yarn. The long-fiber corduroy textile has excellent tensile strength, washing shrinkage, frictional fastness, drapability, elasticity and soft handling.
DETAILED DESCRIPTION - A manufacturing method of long-fiber corduroy textile comprises the steps of: weaving corduroy textile; and cutting the pile yarn thereof. The long-fiber filaments are selected from the group consisting of fine yarn, superfine yarn, divided yarn, sea-island yarn, eluted yarn, undrawn yarn, partially oriented yarn, flat yarn and draw textured yarn.

L76 ANSWER 12 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-459216 [50] WPIX
DOC. NO. NON-CPI: N2001-340516 [50]
TITLE: Link layer error control method for wireless communication, involves re-transmitting copy of transmitted cell having protocol data unit with forward error correction code on reception of feedback indicating error
DERWENT CLASS: W01
INVENTOR: AHN C; AHN C U; AN S; CHANG K; CHO K; GANG C; GANG W; JANG G H; JANG K; JANG K H; KANG C; KANG C G; KANG U S; KANG W; KANG W S; KYO C; AHN C W
PATENT ASSIGNEE: (SMSU-C) SAMSUNG ELECTRONICS CO LTD
COUNTRY COUNT: 5

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
GB 2357017	A	20010606	(200150)*	EN	72[8]	
CN 1286553	A	20010307	(200150)	ZH		
JP 2001127774	A	20010511	(200150)	JA	19	
KR 2001019441	A	20010315	(200157)	KO		
GB 2357017	B	20020710	(200253)	EN		
US 6615382	B1	20030902	(200359)	EN		
JP 3537750	B2	20040614	(200439)	JA	19	
CN 1134928	C	20040114	(200579)	ZH		
KR 607934	B1	20060803	(200714)	KO		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
GB 2357017	A	GB 2000-20174	20000817
KR 2001019441	A	KR 1999-35839	19990827
CN 1286553	A	CN 2000-126197	20000825
CN 1134928	C	CN 2000-126197	20000825
JP 2001127774	A	JP 2000-256373	20000825
JP 3537750	B2	JP 2000-256373	20000825
US 6615382	B1	US 2000-648743	20000828
KR 607934	B1	KR 1999-35839	19990827

FILING DETAILS:

PATENT NO	KIND	PATENT NO

JP 3537750 B2 Previous Publ JP 2001127774 A
KR 607934 B1 Previous Publ KR 2001019441 A

PRIORITY APPLN. INFO: KR 1999-35839 19990827
AN 2001-459216 [50] WPIX
AB GB 2357017 A UPAB: 20060202
NOVELTY - Error ratio of forward channel is estimated based on state of a reverse channel, based on which encoding ratio for forward error correction (FEC) is selected. FEC code (61c,64c) are included in a protocol data unit (60) of a wireless link layer. Cell containing protocol data unit is transmitted via forward channel. Copy of the cell is re-transmitted on reception of feedback via reverse channel indicating error.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for computer readable recording media.
USE - In wideband wireless communication system.
ADVANTAGE - Optimal performance and minimum time delay are obtained, as the number of re-transmission attempts are reduced due to the improvement in probability of correcting forward errors. Reduces cell transmission error and cell transmission delay time by retransmitting multiple copies of corrupted cell in simultaneous multicopy mode.
DESCRIPTION OF DRAWINGS - The figure shows the schematic diagram of the structure of protocol data unit of a wireless link layer.
Protocol data unit (60)
FEC codes (61c,64c)

Member(0001)
ABEQ CN 1286553 A UPAB 20060202
NOVELTY - Error ratio of forward channel is estimated based on state of a reverse channel, based on which encoding ratio for forward error correction (FEC) is selected. FEC code (61c,64c) are included in a protocol data unit (60) of a wireless link layer. Cell containing protocol data unit is transmitted via forward channel. Copy of the cell is re-transmitted on reception of feedback via reverse channel indicating error.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for computer readable recording media.
USE - In wideband wireless communication system.
ADVANTAGE - Optimal performance and minimum time delay are obtained, as the number of re-transmission attempts are reduced due to the improvement in probability of correcting forward errors. Reduces cell transmission error and cell transmission delay time by retransmitting multiple copies of corrupted cell in simultaneous multicopy mode.
DESCRIPTION OF DRAWINGS - The figure shows the schematic diagram of the structure of protocol data unit of a wireless link layer.
Protocol data unit (60)
FEC codes (61c,64c)

Member(0003)
ABEQ JP 2001127774 A UPAB 20060202
NOVELTY - Error ratio of forward channel is estimated based on state of a reverse channel, based on which encoding ratio for forward error correction (FEC) is selected. FEC code (61c,64c) are included in a protocol data unit (60) of a wireless link layer. Cell containing protocol data unit is transmitted via forward channel. Copy of the cell is re-transmitted on reception of feedback via reverse channel indicating error.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included

for computer readable recording media.

USE - In wideband wireless communication system.

ADVANTAGE - Optimal performance and minimum time delay are obtained, as the number of re-transmission attempts are reduced due to the improvement in probability of correcting forward errors. Reduces cell transmission error and cell transmission delay time by retransmitting multiple copies of corrupted cell in simultaneous multicopy mode.

DESCRIPTION OF DRAWINGS - The figure shows the schematic diagram of the structure of protocol data unit of a wireless link layer.

Protocol data unit (60)

FEC codes (61c,64c)

L76 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2000:773272 CAPLUS Full-text

DOCUMENT NUMBER: 134:81254

TITLE: Effects of MBRI9901 (rHG-CSF) on γ-ray irradiated mice with bone marrow transplantation

AUTHOR(S): Fang, M. Z.; Ahn, Y. C.; Kim, M. Y.; Kim, J. H.; Son, J. W.; Choi, J. H.; Kim, J. S.; Bae, M. O.; Shin, M. K.; Lee, H. J.; Lee, M. H.; Kim, W. H.; Kweon, O. K.; Lee, B. J.; Chung, K. H.; Kang, K. Y.; Kim, C. H.; Choi, S. J.; Jang, K. S.; Byun, J. H.; Cho, M. H.

CORPORATE SOURCE: College of Veterinary Medicine, Seoul National University, S. Korea

SOURCE: Asia Pacific Journal of Pharmacology (2000), 14(3), 51-55
CODEN: APJPEV; ISSN: 0217-9687

PUBLISHER: Singapore University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To determine the efficacy of MBRI9901, a recombinant human granulocyte-colony stimulating factor (rhG-CSF) developed by Korea Green Cross Cooperation (KGCC), the authors administered MBRI9901 for days to γ-ray irradiated and followed by bone marrow transplanted mice. The authors then examined the mortality of mice, neutrophil nos., and the ratio of myeloid to erythroid in bone marrow on days 9, 13, 18, 22, and 26 after the drug administration. The authors also performed the chromosome aberration and supravital micronucleus assay at the same time points to determine the potential effects of MBRI9901 on mutational events induced by γ-ray irradiation The authors' results showed that mortality was apparently reduced by MBRI9901, and the number of peripheral neutrophils in MBRI9901-treated group recovered rapidly. The ratio of myeloid to erythroid in bone marrow also rapidly recovered in MBRI9901-treated group compared to control group. Frequencies of micronucleated reticulocytes in MBRI9901-treated group were significantly lower than in control group suggesting a clear anti-micronucleated process of MBRI9901 on abnormal erythrogenesis. However, MBRI9901 did not have an effect on the process of chromosome aberration. The above data strongly suggest that MBRI9901 may stimulate the differentiation of myeloid and maintain the level of peripheral neutrophil after bone marrow transplantation in γ-ray irradiated mice. It also has some effects on the escape from abnormal erythrogenesis induced by γ-ray irradiation

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 14 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN

ACCESSION NUMBER: 1999-546654 [46] WPIX
DOC. NO. NON-CPI: N1999-405816 [46]
TITLE: Electric charge reactivating sensing amplifier for low power memory - has equalizer which is connected electrically to two pairs of data lines, to reuse electric charge during sensing operation when voltage is precharged respectively to step-up and step-down amplifiers
DERWENT CLASS: U14
INVENTOR: AHN J; AHN J H; AN S; NAH H Y; RA K; RHA H; SOHN J H; SON J; SON S
PATENT ASSIGNEE: (HYUN-N) HYUNDAI MICROSEMICON CO LTD; (GLDS-C) LG SEMICON CO LTD
COUNTRY COUNT: 3

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 11238383	A	19990831	(199946)*	JA	5[6]	
US 6011738	A	20000104	(200008)	EN		
KR 99069373	A	19990906	(200046)	KO	[8]	
KR 300035	B	20010906	(200227)	KO		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 11238383 A		JP 1998-267864	19980922
KR 99069373 A		KR 1998-3577	19980207
KR 300035 B		KR 1998-3577	19980207
US 6011738 A		US 1998-161390	19980928

FILING DETAILS:

PATENT NO	KIND	PATENT NO
KR 300035 B	Previous Publ	KR 99069373 A

PRIORITY APPLN. INFO: KR 1998-3577 19980207
AN 1999-546654 [46] WPIX
AB JP 11238383 A UPAB: 20060115
NOVELTY - An equalizer (23) is connected electrically to two pairs of data lines (DL0,DL0b,DL1,DL1b), to reuse the electric charge during sensing operation when a voltage is precharged respectively to a step-up amplifier (20) and a step-down amplifier (21). DETAILED DESCRIPTION - Data lines (DL0,DL0b) connected to the output terminal of a step-up amplifier (20), have voltage levels higher than a precharge voltage. Data lines (DL1,DL1b) connected to the output terminal of a step-down amplifier (21), have voltage levels lower than the precharge voltage.
USE - For low power memory.
ADVANTAGE - Enables reuse of electric charge used during sensing operation.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of an electric charge reactivating sensing amplifier. (20) Step-up amplifier; (21) Step-down amplifier; (23) Equalizer; (DL0,DL0b,DL1,DL1b) Data lines.

Member(0002)
ABEQ US 6011738 A UPAB 20060115
NOVELTY - An equalizer (23) is connected electrically to two pairs of

data lines (DL0,DL0b,DL1,DL1b), to reuse the electric charge during sensing operation when a voltage is precharged respectively to a step-up amplifier (20) and a step-down amplifier (21). DETAILED DESCRIPTION - Data lines (DL0,DL0b) connected to the output terminal of a step-up amplifier (20), have voltage levels higher than a precharge voltage. Data lines (DL1,DL1b) connected to the output terminal of a step-down amplifier (21), have voltage levels lower than the precharge voltage.

USE - For low power memory.

ADVANTAGE - Enables reuse of electric charge used during sensing operation. DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of an electric charge reactivating sensing amplifier. (20) Step-up amplifier; (21) Step-down amplifier; (23) Equalizer; (DL0,DL0b,DL1,DL1b) Data lines.

L76 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:720075 CAPLUS Full-text
DOCUMENT NUMBER: 132:101752
TITLE: Magnetic properties of Cr3+ substituted BaFe12O19 powders grown by a sol-gel method
AUTHOR(S): Kim, Chul Sung; An, Sung Yong; Son, Ji Hee; Lee, Jae-Gwang; Oak, Hang Nam
CORPORATE SOURCE: Department of Physics, Kookmin University, Seoul, 136-702, S. Korea
SOURCE: IEEE Transactions on Magnetics (1999), 35(5, Pt. 1), 3160-3162
CODEN: IEMGAQ; ISSN: 0018-9464
PUBLISHER: Institute of Electrical and Electronics Engineers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cr3+ substituted Ba-hexaferrite was fabricated by a sol-gel method. The crystallog. and magnetic properties of BaFe12-xCrxO19 ($0 \leq x \leq 7$) were studied XRD, Rutherford back-scattering spectrometry, vibrating sample magnetometry and Moessbauer spectroscopy. The crystal structure is magnetoplumbite, typical of M-type hexagonal ferrite. By substituting Fe3+ in BaFe12O19 by Cr3+, we have been able to attribute the Moessbauer parameters to the 5 crystallog. sites of the structure. Only the octahedral sublattices were occupied by Cr ions. The isomer shifts indicate that the valence state of the Fe ions was Fe3+. The Curie temps. of BaFe12-xCrxO19 decreased linearly increasing Cr-substitution, at a rate of 55 K/Cr atom.
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L76 ANSWER 16 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-537501 [45] WPIX
TITLE: Dry dehydration device of a food wastes disposing vehicle
DERWENT CLASS: Q35
INVENTOR: AHN S G; AN S; CHANG G S; JANG K; KIM I; KIM I G
PATENT ASSIGNEE: (KANG-N) KANGLIM CO LTD; (KANG-N) KANGLIM SPECIAL PURPOSE VEHICLE JH
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
KR 98056358	A	19980925	(199945)*	KO	[10]	

KR 185121 B1 19990415 (200051) KO

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
KR 98056358 A		KR 1996-75625	19961228
KR 185121 B1		KR 1996-75625	19961228

PRIORITY APPLN. INFO: KR 1996-75625 19961228
AN 1999-537501 [45] WPIX

L76 ANSWER 17 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 1999-537500 [45] WPIX
TITLE: Vacuum drying device of a food wastes disposing vehicle
DERWENT CLASS: Q35
INVENTOR: AHN S G; AN S; CHANG G S; JANG K; KIM I; KIM I G
PATENT ASSIGNEE: (KANG-N) KANGLIM CO LTD; (KANG-N) KANGLIM SPECIAL PURPOSE VEHICLE JH
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
KR 98056357	A	19980925	(199945)*	KO	[10]	
KR 185120	B1	19990415	(200051)	KO		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
KR 98056357 A		KR 1996-75624	19961228
KR 185120 B1		KR 1996-75624	19961228

PRIORITY APPLN. INFO: KR 1996-75624 19961228
AN 1999-537500 [45] WPIX

L76 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2007:888914 CAPLUS Full-text
TITLE: A process of kim chi that prolongs preservation
INVENTOR(S): You, Hung - Kun; Son, Jun - Ho; Im, Chol; Jang, Kun - U; Han, Min - Su; No, Hong - Shik
PATENT ASSIGNEE(S): MI Won Co., Ltd., S. Korea
SOURCE: Repub. Korea
CODEN: KRXXFC
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 9509180	B1	19950816	KR 1992-24031	19921212

PRIORITY APPLN. INFO.: KR 1992-24031 19921212

AB Unavailable

L76 ANSWER 19 OF 20 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-049903 [05] WPIX
TITLE: Hangul validation suite for hangul unix
DERWENT CLASS: T01
INVENTOR: AN S; IM K; KIM H; KIM J; NAMKUNG H; SON D; U Y
PATENT ASSIGNEE: (KOEL-N) KOREA ELECTRONICS & TELECOM RES
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
KR 9502163	B1	19950314	(199705)*	KO	[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
KR 9502163 B1		KR 1992-15844	19920901

PRIORITY APPLN. INFO: KR 1992-15844 19920901
AN 1997-049903 [05] WPIX
AB KR 9502163 B1 UPAB: 20050514
The validation method involves checking the environment for the HVS. The HVS is stopped to print the required environment when the HVS is not in the proper environment. The third step generates the required data structure and stores the related data to the disk files when the HVS is in the proper environment. The fourth step involves finding whether the validation mode is in the individual mode or the global checking mode. The individual validation script is called for the individual checking mode. The multiple validation scripts for the global checking mode are called in sequence. The testing results are assessed and statistical data is generated.

L76 ANSWER 20 OF 20 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 1989:271410 BIOSIS Full-text
DOCUMENT NUMBER: PREV198988007492; BA88:7492
TITLE: FATTY ACID COMPOSITIONS OF PINUS-KORAIENSIS SEED.
AUTHOR(S): YOON T-H [Reprint author]; IM K-J; KOH E T; JU J-S
CORPORATE SOURCE: 610 ELM AVE, SCH HUMAN DEVELOPMENT, UNIV OKLAHOMA, NORMAN, OKLAHOMA 73019, USA
SOURCE: Nutrition Research, (1989) Vol. 9, No. 3, pp. 357-361. CODEN: NTRSDC. ISSN: 0271-5317.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 6 Jun 1989
Last Updated on STN: 6 Jun 1989
AB The fatty acid compositions of two years samples of Pinus koraiensis seed were analyzed by gas and gas-liquid chromatography. The fatty acid compositions between the two years samples were almost identical. The seed oil consisted of 21 fatty acids whose chain lengths are from 14:0 to 22:0. The seed oil contained three nonmethylene-interrupted polyenoic (NMIP) acids 18:3Δ5,9,12,20:2δ5,11, and 20:3δ5,11,14 as omega 5 fatty acids. The total amounts of three omega-5 fatty acids was 12.38%; and among these 18:3δ5,9,12

acid was greatest, 11.14%. tHe seed contained oleic acid (28.40%) and linoleic acid (47.92) as major fatty acids. The ratio of poly unsaturated to saturated fatty acids was 7.04. The fatty acids composition of P. koraiensis seed are ideal for hypolipemic effects. Since the koraiensis seeds has been claimed for curing and/or preventing degenerative chronic diseases, i.e. heart disease and diabetes, the effects of omega-5 fatty acids on lipids and glucose metabolism can be studied with P. koraiensis seeds.

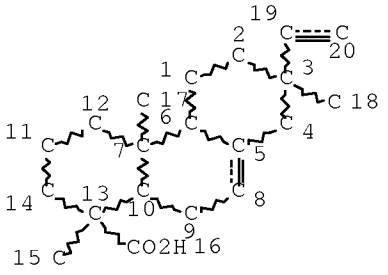
FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIX, JAPIO, PASCAL, DISSABS'
ENTERED AT 15:45:18 ON 18 JUL 2008

L81 2 SEA ABB=ON PLU=ON L73 AND (LIPEMIA OR LIPAEMIA OR HYPERLIPEMIA OR HYPERLIPAEMIA OR ATHEROGEN? OR ATHEROMA OR ARTER?(3A)(FATTY STREAK))

L82 0 SEA ABB=ON PLU=ON L81 NOT L75

FILE 'HOME' ENTERED AT 15:46:22 ON 18 JUL 2008

L9 STR

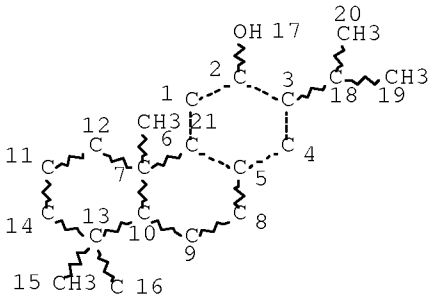


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

L11 STR

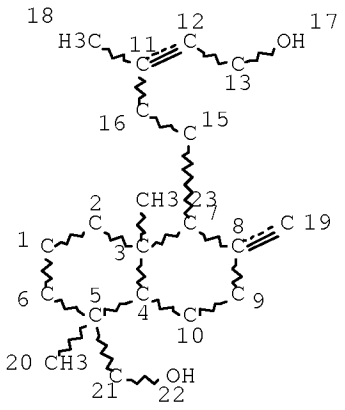


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

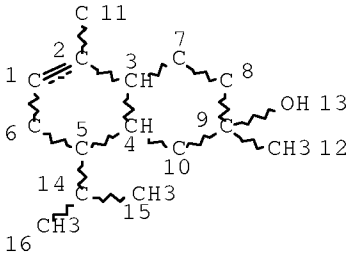
L15 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

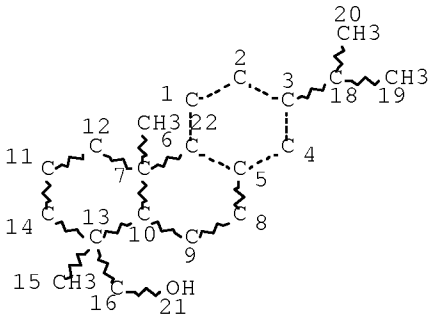
STEREO ATTRIBUTES: NONE
L17 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 16

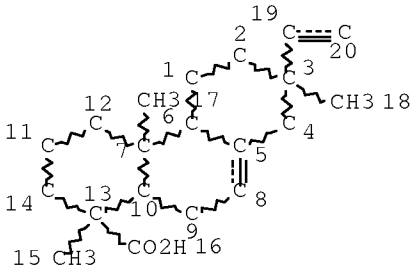
STEREO ATTRIBUTES: NONE
L23 54 SEA FILE=REGISTRY SSS FUL L15 OR L17
L26 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

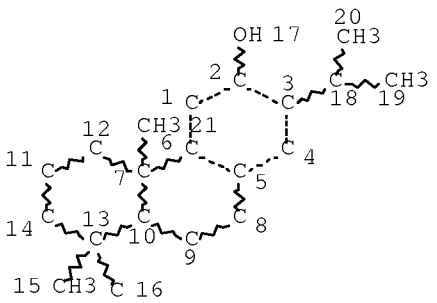
STEREO ATTRIBUTES: NONE
L28   837 SEA FILE=REGISTRY SSS FUL L9 OR L11 OR L26
L29   STR



NODE ATTRIBUTES:
CONNECT IS X2 RC AT   1
CONNECT IS X2 RC AT   2
CONNECT IS X2 RC AT   4
CONNECT IS X2 RC AT   8
CONNECT IS X2 RC AT   9
CONNECT IS X2 RC AT 11
CONNECT IS X2 RC AT 12
CONNECT IS X2 RC AT 14
CONNECT IS X1 RC AT 20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

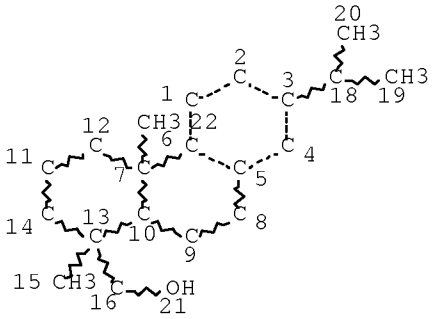
STEREO ATTRIBUTES: NONE
L30   STR



NODE ATTRIBUTES:
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 11
CONNECT IS X2 RC AT 12
CONNECT IS X2 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
L31 STR

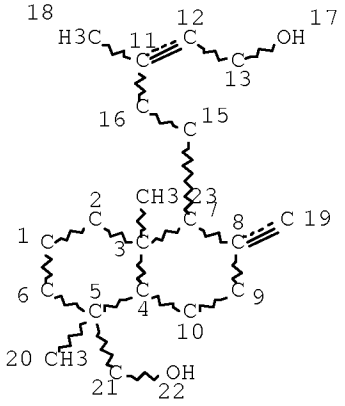


NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 4
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 11
CONNECT IS X2 RC AT 12
CONNECT IS X2 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

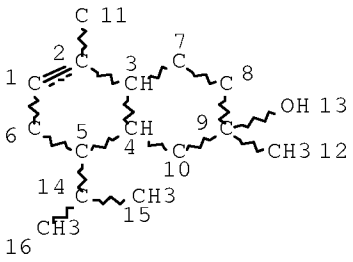
L32 STR



NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 2
CONNECT IS X2 RC AT 6
CONNECT IS X2 RC AT 9
CONNECT IS X2 RC AT 10
CONNECT IS X2 RC AT 15
CONNECT IS X2 RC AT 16
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L33 STR



NODE ATTRIBUTES:
CONNECT IS X2 RC AT 1
CONNECT IS X2 RC AT 6
CONNECT IS X2 RC AT 7
CONNECT IS X2 RC AT 8
CONNECT IS X2 RC AT 10
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 16

```
STEREO ATTRIBUTES: NONE
L34         891 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 OR L23
L36         352 SEA FILE=REGISTRY SUB=L34 SSS FUL (L29 OR L30 OR L31 OR
                L32 OR L33)

    FILE 'REGISTRY' ENTERED AT 14:49:59 ON 18 JUL 2008
L1           11 SEA ABB=ON  PLU=ON  (108904-92-3/BI OR 13742-23-9/BI OR
                19435-97-3/BI OR 22595-48-8/BI OR 26296-35-5/BI OR
                3772-55-2/BI OR 514-62-5/BI OR 5835-26-7/BI OR 640-43-7/BI
                OR 864494-92-8/BI OR 9027-63-8/BI)
L2           10 SEA ABB=ON  PLU=ON  L1 AND RSD/FA
L3              STR
L4           32 SEA SSS SAM L3
                E DIMETHOXYMETHYL/CN 5
L5            1 SEA ABB=ON  PLU=ON  DIMETHOXYMETHYL/CN
                D STR
L6           22 SEA ABB=ON  PLU=ON  L4 AND O=>3
                D SCAN
L7              STR L3
L8           26 SEA SSS SAM L7
L9              STR
L10           2 SEA SSS SAM L9
L11             STR L7
L12          16 SEA SSS SAM L11
L13             STR L7
L14           1 SEA SSS SAM L13
L15             STR
L16           2 SEA SSS SAM L15
L17             STR
L18           0 SEA SSS SAM L17
L19          19 SEA SSS SAM L9 OR L11 OR L13 OR L15 OR L17
L20          18 SEA SSS SAM L9 OR L11 OR L13
L21         291 SEA SSS FUL L9 OR L11 OR L13
                D COST
L22           2 SEA SSS SAM L15 OR L17
L23          54 SEA SSS FUL L15 OR L17
                SAV TEMP L21 R591A1/A
                SAV TEMP L23 R591A2/A
L24         345 SEA ABB=ON  PLU=ON  L21 OR L23
                D QUE L21
                D QUE L23
                D QUE STAT L21
                D QUE STAT L23
L26             STR L13
L27          43 SEA SSS SAM L9 OR L11 OR L26
                D QUE
L28         837 SEA SSS FUL L9 OR L11 OR L26
                SAV TEMP L28 R591B2/A
L29             STR L9
L30             STR L11
L31             STR L26
L32             STR L15
L33             STR L17
L34         891 SEA ABB=ON  PLU=ON  L28 OR L23
L35          12 SEA SUB=L34 SSS SAM (L29 OR L30 OR L31 OR L32 OR L33)
L36         352 SEA SUB=L34 SSS FUL (L29 OR L30 OR L31 OR L32 OR L33)
                SAV TEMP L36 R591C/A

     FILE 'CAPLUS' ENTERED AT 15:17:30 ON 18 JUL 2008
```

```
L38        2639 SEA ABB=ON  PLU=ON  L36
L39         113 SEA ABB=ON  PLU=ON  L38 AND THU/RL
                E CARDIOVASCULAR DISEASES+ALL/CT
                E E2+ALL
L40       24235 SEA ABB=ON  PLU=ON  "CARDIOVASCULAR SYSTEM, DISEASE"+OLD,PF
                T/CT
                E E115+ALL
L41       23067 SEA ABB=ON  PLU=ON  "CARDIOVASCULAR AGENTS"+PFT/CT
                E ANTICHOLESTEREMIC AGENTS+ALL/CT
L42       12356 SEA ABB=ON  PLU=ON  "ANTICHOLESTEREMIC AGENTS"+OLD/CT
                E HYPERLIPIDEMIA+ALL/CT
L43        9364 SEA ABB=ON  PLU=ON  HYPERLIPIDEMIA+OLD/CT
                E ATHEROSCLEROSIS+ALL/CT
L44       45237 SEA ABB=ON  PLU=ON  ATHEROSCLEROSIS+OLD/CT
                E ANTIATHEROSCLEROSIS AGENTS+ALL/CT
                E E2+ALL
L45       10350 SEA ABB=ON  PLU=ON  "ANTIARTERIOSCLEROTICS (L) ANTIATHEROSC
                LEROTICS"+PFT/CT
L46           9 SEA ABB=ON  PLU=ON  L39 AND ((L40 OR L41 OR L42 OR L43 OR
                L44 OR L45))
L47          84 SEA ABB=ON  PLU=ON  L38 AND (?ATHEROSCLER? OR (HEART OR
                CARDIOVASCULAR OR CARDIAC OR CARDIO VASCULAR)(3A)(DISEAS?
                OR DISORDER) OR ?LIPIDEMI? OR ?LIPIDAEMI? OR ?CHOLESTER?)
L48          20 SEA ABB=ON  PLU=ON  L47 AND (TREAT? OR THERAP? OR PREVENT?)

     FILE 'REGISTRY' ENTERED AT 15:25:47 ON 18 JUL 2008
                D QUE STAT L36

     FILE 'CAPLUS' ENTERED AT 15:25:47 ON 18 JUL 2008
L49          22 SEA ABB=ON  PLU=ON  L46 OR L48
                D L49 1-22
                SEL HIT L49 1-22 RN

     FILE 'REGISTRY' ENTERED AT 15:28:01 ON 18 JUL 2008
L50          27 SEA ABB=ON  PLU=ON  (1740-19-8/BI OR 5835-26-7/BI OR
                17829-02-6/BI OR 35928-32-6/BI OR 514-62-5/BI OR 59861-20-0
                /BI OR 59861-21-1/BI OR 108904-92-3/BI OR 120899-16-3/BI
                OR 120899-17-4/BI OR 120899-20-9/BI OR 120899-21-0/BI OR
                120899-24-3/BI OR 13742-23-9/BI OR 1857-24-5/BI OR
                22595-48-8/BI OR 26296-35-5/BI OR 27527-13-5/BI OR
                3772-55-2/BI OR 5155-70-4/BI OR 57055-39-7/BI OR 58508-46-6
                /BI OR 58508-50-2/BI OR 58508-58-0/BI OR 58508-59-1/BI OR
                59861-25-5/BI OR 864494-92-8/BI)
                D QUE
                D L50 1-27 IDE CAN

     FILE 'CAOLD' ENTERED AT 15:28:41 ON 18 JUL 2008
L51          98 SEA ABB=ON  PLU=ON  L50

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 15:29:27 ON 18 JUL 2008
L52         648 SEA ABB=ON  PLU=ON  L50
L53           6 SEA ABB=ON  PLU=ON  L52 AND (?ATHEROSCLER? OR (HEART OR
                CARDIOVASCULAR OR CARDIAC OR CARDIO VASCULAR)(3A)(DISEAS?
                OR DISORDER) OR ?LIPIDEMI? OR ?LIPIDAEMI? OR ?CHOLESTER?)
L54           4 DUP REM L53 (2 DUPLICATES REMOVED)
                D 1-4 IBIB ABS

     FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIX, JAPIO, PASCAL, DISSABS'
     ENTERED AT 15:30:23 ON 18 JUL 2008
L55        2104 SEA ABB=ON  PLU=ON  ("JEONG T"? OR "TAE-SOOK J"?)/AU
```

```
L56       53393 SEA ABB=ON  PLU=ON  ("LEE W"? OR "WOO-SONG L"?)/AU
L57      153131 SEA ABB=ON  PLU=ON  ("KIM H"? OR "HYOUNG-CHIN, K"?)/AU
L58       33777 SEA ABB=ON  PLU=ON  ("CHOI Y"? OR "YANG-KYU C"?)/AU
L59        5092 SEA ABB=ON  PLU=ON  ("AN S"? OR "SO-JIN A"?)/AU
L60        1549 SEA ABB=ON  PLU=ON  ("IM K"? OR "KYOUNG-RAN I"?)/AU
L61        4131 SEA ABB=ON  PLU=ON  ("JANG K"? OR "KI-CHANG J"?)/AU
L62         118 SEA ABB=ON  PLU=ON  ("MOON O"? OR "OG-SUNG M"?)/AU
L63        5609 SEA ABB=ON  PLU=ON  ("SON J"? OR "JUN-SEOCK S"?)/AU
L64           2 SEA ABB=ON  PLU=ON  L55 AND L56 AND L57 AND L58 AND L59
                 AND L60 AND L61 AND L62 AND L63
L65         444 SEA ABB=ON  PLU=ON  L55 AND ((L56 OR L57 OR L58 OR L59 OR
                 L60 OR L61 OR L62 OR L63))
L66        2829 SEA ABB=ON  PLU=ON  L56 AND ((L57 OR L58 OR L59 OR L60 OR
                 L61 OR L62 OR L63))
L67        4009 SEA ABB=ON  PLU=ON  L57 AND ((L58 OR L59 OR L60 OR L61 OR
                 L62 OR L63))
L68         227 SEA ABB=ON  PLU=ON  L58 AND ((L59 OR L60 OR L61 OR L62 OR
                 L63))
L69          12 SEA ABB=ON  PLU=ON  L59 AND ((L60 OR L61 OR L62 OR L63))
L70           8 SEA ABB=ON  PLU=ON  L60 AND ((L61 OR L62 OR L63))
L71           7 SEA ABB=ON  PLU=ON  L61 AND (L62 OR L63)
L72           2 SEA ABB=ON  PLU=ON  L62 AND L63
L73         237 SEA ABB=ON  PLU=ON  ((L55 OR L56 OR L57 OR L58 OR L59 OR
                 L60 OR L61 OR L62 OR L63) OR (L65 OR L66 OR L67 OR L68))
                 AND ((T OR TORREY?)(W) NUCIFER? OR CONIFER? OR (KAYA OR
                 CONE(3A) BEAR?)(3A) TREE OR JAPANESE(1W) YEW)
L74           6 SEA ABB=ON  PLU=ON  L73 AND (?ATHEROSCLER? OR (HEART OR
                 CARDIOVASCULAR OR CARDIAC OR CARDIO VASCULAR)(3A)(DISEAS?
                 OR DISORDER) OR ?LIPIDEMI? OR ?LIPIDAEMI? OR ?CHOLESTER?)
L75          27 SEA ABB=ON  PLU=ON  L64 OR (L69 OR L70 OR L71 OR L72) OR
                 L74
L76          20 DUP REM L75 (7 DUPLICATES REMOVED)
                 D 1-20 IBIB ABS

     FILE 'HOME' ENTERED AT 15:40:59 ON 18 JUL 2008
                 D QUE L36

     FILE 'CAPLUS' ENTERED AT 15:42:31 ON 18 JUL 2008
L77           2 SEA ABB=ON  PLU=ON  L38 AND (LIPEMIA OR LIPAEMIA OR
                 HYPERLIPEMIA OR HYPERLIPAEMIA OR ATHEROGEN? OR ATHEROMA OR
                 ARTER?(3A)(FATTY STREAK))
L78           2 SEA ABB=ON  PLU=ON  L77 AND (TREAT? OR THERAP? OR PREVENT?)
L79           0 SEA ABB=ON  PLU=ON  L78 NOT L48

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 15:44:31 ON 18 JUL 2008
L80           0 SEA ABB=ON  PLU=ON  L52 AND (LIPEMIA OR LIPAEMIA OR
                 HYPERLIPEMIA OR HYPERLIPAEMIA OR ATHEROGEN? OR ATHEROMA OR
                 ARTER?(3A)(FATTY STREAK))

     FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIX, JAPIO, PASCAL, DISSABS'
     ENTERED AT 15:45:18 ON 18 JUL 2008
L81           2 SEA ABB=ON  PLU=ON  L73 AND (LIPEMIA OR LIPAEMIA OR
                 HYPERLIPEMIA OR HYPERLIPAEMIA OR ATHEROGEN? OR ATHEROMA OR
                 ARTER?(3A)(FATTY STREAK))
L82           0 SEA ABB=ON  PLU=ON  L81 NOT L75

     FILE 'HOME' ENTERED AT 15:46:22 ON 18 JUL 2008
                 D QUE L36
```

FILE HOME

FILE CAPLUS

FILE COVERS 1907 - 18 Jul 2008 VOL 149 ISS 4
FILE LAST UPDATED: 17 Jul 2008 (20080717/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply They are available for your review at:

http://www.cas.org/legal/infopolicy.html

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUL 2008 HIGHEST RN 1034594-49-4
DICTIONARY FILE UPDATES: 17 JUL 2008 HIGHEST RN 1034594-49-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE CAOLD
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of

all substance data from the REGISTRY file. Enter HELP FIRST for more information.

FILE MEDLINE
FILE LAST UPDATED: 17 Jul 2008 (20080717/UP). FILE COVERS 1949 TO DA

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

FILE BIOSIS
FILE COVERS 1926 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 16 July 2008 (20080716/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE EMBASE
FILE COVERS 1974 TO 18 Jul 2008 (20080718/ED)

EMBASE was reloaded on March 30, 2008.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Beginning January 2008, Elsevier will no longer provide EMTREE codes as part of the EMTREE thesaurus in EMBASE. Please update your current-awareness alerts (SDIs) if they contain EMTREE codes.

For further assistance, please contact your local helpdesk.

FILE WPIX
FILE LAST UPDATED: 15 JUL 2008 <20080715/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200845 <200845/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE
>>> Now containing more than 1.1 million chemical structures in DCR <<

>>> IPC Reform backfile reclassifications have been loaded to the end March 2008. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC, 20071130/UPIC and 20080401/UPIC.
ECLA reclassifications to April and US national classifications to the end of January 2008 have also been loaded. Update dates 20080401/UPEC and /UPNC have been assigned to these. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:

http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomsonreuters.com/support/patents/coverage/latestup

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_07

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <

>>> Please note that the COPYRIGHT notification has changed <<<

FILE JAPIO
FILE LAST UPDATED: 8 JUL 2008 <20080708/UP>
MOST RECENT PUBLICATION DATE: 27 MAR 2008 <20080327/PD>

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE PASCAL
FILE LAST UPDATED: 14 JUL 2008 <20080714/UP>
FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE
IN THE BASIC INDEX (/BI) FIELD <<<

FILE DISSABS
FILE COVERS 1861 TO 25 JUN 2008 (20080625/ED)